

**BOBBY JINDAL**  
GOVERNOR



**HAROLD LEGGETT, PH.D.**  
SECRETARY

## State of Louisiana

### DEPARTMENT OF ENVIRONMENTAL QUALITY ENVIRONMENTAL SERVICES

Certified Mail No.

Activity No.: PER20060028  
Agency Interest No. 2049

Mr. Mike Cohen  
General Manager & Sr. VP of Tech. Engr. Services  
BASF Corporation  
P.O. Box 457  
Geismar, LA 70734-0457

RE: Part 70 Operating Permit; PYR/NVP/PVP/PVP-I Plants; BASF Corporation - Geismar Site;  
Geismar; Ascension Parish; Louisiana

Dear Mr. Cohen:

This is to inform you that the permit renewal and minor modification for the above referenced facility has been approved under LAC 33:III.501. The permit is both a state preconstruction and Part 70 Operating Permit. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight on the \_\_\_\_\_ of \_\_\_\_\_, 2013, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and agency interest number cited above should be referenced in future correspondence regarding this facility.

Done this \_\_\_\_\_ day of \_\_\_\_\_, 2008.

Permit No.: 2039-V1

Sincerely,

Cheryl Sonnier Nolan  
Assistant Secretary  
CSN:kap

c: EPA Region VI

**AIR PERMIT BRIEFING SHEET  
AIR PERMITS DIVISION  
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

**PYR/NVP/PVP/PVP-I Plants  
Agency Interest No.: 2049  
BASF Corporation – Geismar Site  
Geismar, Ascension Parish, Louisiana**

**I. Background**

BASF Corporation (BASF) operates a chemical manufacturing complex in Geismar, Ascension Parish, Louisiana (the Geismar Site). The Geismar Site has been divided into a number of operating areas for the purpose of obtaining Part 70 Operating Permits: the Chemical Intermediates–North/Diols Complex which includes 1,4-butanediol (1,4-BD), gamma-butyrolactone (GBL), n-methyl pyrrolidone (NMP), tetrahydrofuran (THF), and polytetrahydrofuran (Poly THF) plants; the Acetylene Plant; the Amine Plant; the Aniline I and II Plants; the EO/EG (ethylene oxide/ethylene glycol) Plant; the Glyoxal Plant; the MDI (methylenebis (phenylisocyanate)) 1 and 2 Plants; the PYR/NVP/PVP/PVP-I (vinylpyrrolidone/polyvinylpyrrolidone) Plants; the Polyol Plant; the Surfactants Plant; the TDI (toluene diisocyanate) Plant; and the Utilities Plant.

The PYR/NVP/PVP/PVP-I Plants currently operate under Part 70 Operating Permit No. 2039-V0 issued on April 11, 2002. This Part 70 operating permit addresses the PYR/NVP/PVP/PVP-I Plants only.

**II. Origin**

A permit application and Emission Inventory Questionnaire dated October 12, 2006 were submitted by BASF Corporation requesting a Part 70 operating permit renewal and minor modification. BASF also submitted a permit application addendum dated December 28, 2007, but it was rescinded by BASF on February 8, 2008.

**III. Description**

**Process Description**

The PYR/NVP/PVP/PVP-I Plants consist of production facilities to produce pyrrolidone and vinyl pyrrolidone through continuous processes, and polyvinylpyrrolidone products through batch processes.

Pyrrolidone (PYR) is produced by reacting butyrolactone with ammonia. The pyrrolidone is then reacted with acetylene in the presence of potassium hydroxide to form vinylpyrrolidone (NVP). NVP is reacted in the presence of additives and initiators to form a number of different types of copolymers and polyvinylpyrrolidone (PVP) products in batch processes. These products are spray dried or transferred to trucks or drums for transport.

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**Permit Description**

In addition to this permit serving as a Part 70 Operating Permit renewal, BASF Corporation (BASF) is proposing minor modifications to its current Part 70 permit in order to increase production rates and to make necessary changes to operating conditions. Also, minor revisions have been made to the General Condition XVII emissions and to the Insignificant Activities list.

Changes in potential emissions as a result of the minor modifications proposed in the October 2006 submittal are minimal. Therefore, the New Source Review (NSR) and Prevention of Significant Deterioration (PSD) programs do not apply.

Estimated emissions in tons per year for the PYR/NVP/PVP/PVP-I Plants are as follows:

<b>Pollutant</b>	<b>Before</b>	<b>After</b>	<b>Change</b>
PM <sub>10</sub>	7.25	8.48	+ 1.23
SO <sub>2</sub>	0.004	0.01	+ 0.006
NO <sub>X</sub>	0.79	1.15	+ 0.36
CO	4.28	6.23	+ 1.95
VOC *	28.93	31.62	+ 2.69

**\*VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):**

<b>Pollutant</b>	<b>Before</b>	<b>After</b>	<b>Change</b>
Acetaldehyde <sup>1</sup>	0.86	1.18	+ 0.32
Formaldehyde	0.001	0.001	0.00
n-Hexane	0.01	0.02	+ 0.01
Vinyl Acetate	0.17	0.13	- 0.04
Triethylamine	1.48	1.57	+ 0.09
<b>Total</b>	<b>2.52</b>	<b>2.90</b>	<b>+ 0.38</b>

<sup>1</sup> Highly Reactive Volatile Organic Compound (HRVOC)

Other VOC		28.72	
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<b>Non-VOC LAC 33:III.Chapter 51 Toxic Air Pollutants (TAPs):</b>			
<b>Pollutant</b>	<b>Before</b>	<b>After</b>	<b>Change</b>
Ammonia	7.83	9.96	+ 2.13
Chlorine	0.02	0.02	0.00
Sulfuric Acid	0.002	0.00	- 0.002
<b>Total</b>	<b>7.85</b>	<b>9.98</b>	<b>+ 2.13</b>

**IV. Type of Review**

This permit was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations, New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP). Prevention of Significant Deterioration (PSD) and Non-Attainment New Source Review (NNSR) regulations do not apply.

This Geismar Site is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51. Air Toxics Compliance Plan No. 92067 was approved for the Geismar Site on November 1, 1994.

**V. Credible Evidence**

Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit that state specific methods that may be used to assess compliance with applicable requirements, pursuant to 40 CFR Part 70 and EPA's Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed shall be considered for purposes of Title V compliance certifications. Furthermore, for purposes of establishing whether or not a person has violated or is in violation of any emissions limitation or standard or permit condition, nothing in this permit shall preclude the use, including the exclusive use, by any person of any such credible evidence or information.

**VI. Public Notice**

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, Louisiana on <date>, 2008; and in *The Gonzales Weekly*, Gonzales, Louisiana on <date>, 2008. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on <date>. The draft permit

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was also submitted to US EPA Region VI on <date>. All comments will be considered prior to the final permit decision.

**VII. Effects on Ambient Air**

Dispersion Model(s) Used: <None>

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Quality Standard or (National Ambient Air Quality Standard (NAAQS))
N/A			

**VIII. General Condition XVII Activities**

Work Activity	Schedule	Emission Rates - tons				
		PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
<b>Startup/Shutdown Events</b>						
Plant Startup/Shutdown	10/year	-	-	-	-	3.2
General Equipment Startup/Shutdown	365/year	-	-	-	-	0.37
<b>Sampling</b>						
NVP in-Process Sampling	4,422/year	-	-	-	-	0.001
2-Pyrrolidone Sampling	3,310/year	-	-	-	-	0.011
PVP Sampling	11,023/year	-	-	-	-	0.009
Return/Knockout Pot Sampling	208/year	-	-	-	-	0.003
<b>Equipment Preparation and Maintenance</b>						
Flare Routine Maintenance	1/year	-	-	-	-	< 5
Isopropanol Filter Maint.	12/year	-	-	-	-	< 0.001
NVP Filter Cleaning	52/year	-	-	-	-	< 0.001
PYR Filter Cleaning	52/year	-	-	-	-	< 0.001
NVP Tank Truck Venting	15 trucks/year	-	-	-	-	0.001

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<b>Work Activity</b>	<b>Schedule</b>	<b>Emission Rates - tons</b>				
		<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>X</sub></b>	<b>CO</b>	<b>VOC</b>
Vinyl Acetate Tank Truck Venting	3 trucks/year	-	-	-	-	0.063
PYR Drum Cleaning	250/year	-	-	-	-	< 0.001
MCH Drum Cleaning	224/year	-	-	-	-	0.019
TEA Drum Cleaning	24/year	-	-	-	-	-
General Equipment Maint.	365/year	-	-	-	-	0.37
Formic Acid Drum Cleaning	98/year	-	-	-	-	0.003
NVP Drum Cleaning	250/year	-	-	-	-	< 0.001
<b>Miscellaneous Routine Activities</b>						
Biocides Addition	292/year	-	-	-	-	0.027
Iodine Tote Bag Collapse	1,138/year	-	-	-	-	-

#### **IX. Insignificant Activities**

<b>Description</b>	<b>Max Rate (TPY) or Tank Capacity</b>	<b>Citation</b>
Package Boiler	1 MMBTU/hr	LAC 33:III.501.B.5.A.1
Package Boiler	10 MMBTU/hr	LAC 33:III.501.B.5.A.1
TK-290 Potassium Hydroxide	10,000 gallons	LAC 33:III.501.B.5.A.4
TK-594 Hydrogen Peroxide	7,000 gallons	LAC 33:III.501.B.5.A.4
Noncommercial Empty Drum Washing	846 drums/yr	LAC 33:III.501.B.5.A.7
Temporary Portable Diesel Fuel Tank used in maintenance and construction activities	500 gallons	LAC 33:III.501.B.5.A.8
Temporary Portable Gasoline Fuel Tank used in maintenance and construction activities	500 gallons	LAC 33:III.501.B.5.A.8
TK-045 Bleach Tank	2,500 gallons	LAC 33:III.501.B.5.A.10
Bleach Totes	-	LAC 33:III.501.B.5.A.10
Portable Cooling Tower	3,500 gpm	LAC 33:III.501.B.5.A.12
Antifoam Drums	-	LAC 33:III.501.B.5.B.8
Soap Drums	-	LAC 33:III.501.B.5.B.8
Cooling Tower Chemicals	-	LAC 33:III.501.B.5.B.8

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Description	Max Rate (TPY) or Tank Capacity	Citation
TK-393 25% Sodium Hydroxide Tank	10,000 gallons	LAC 33:III.501.B.5.B.40
TK-394 10% Sodium Hydroxide Tank	10,000 gallons	LAC 33:III.501.B.5.B.40

## LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

**PYR/NVP/PVP/PVP-I Plants**  
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**X. Table 1. Applicable Louisiana and Federal Air Quality Requirements**

ID No.:	Description	LAC 33:III.Chapter																
		5'	9	11	13	15	2103	2107	2111	2113	2115	2122	2147	2149	2153	51*	56	59*
AI2049	BASF – Geismar Site		1	1	1											1	1	1
UNF0003	PYR/NVP/PVP/PVP-I Plants	1																
EQT0582	1-90 NVP Water Scrubber	1															1	
EQT0583	1-90(a) NVP Distillation Vent		1	1													3	
EQT0584	1-90(b) D-180A/B Pyrrolidone Check Tanks																	3
EQT0585	1-90(c) D-272A/BX NVP Product Check Tanks																	3
EQT0586	1-90(f) D-280/281 Inhibitor Drums																	3
EQT0587	2-90 PYR/NVP/PVP Plants – Flare		1		3												1	
EQT0588	2-90(c) TK-291 By-product Alcohol Tank																1	
EQT0589	2-90(d) TK-292 NVP Residue Tank																1	
EQT0590	2-90(e) TK-392A Multi-purpose Tank																1	
EQT0591	2-90(f) TK-392B Multi-purpose Tank																1	
EQT0592	2-90(g) TK-590 Isopropyl Alcohol Tank																1	
EQT0593	2-90(h) TK-591 Multi-purpose Tank																1	
EQT0594	2-90(i) TK-592 Vinyl Acetate Tank																1	
EQT0595	2-90(j) TK-596 25% Aqueous Ammonia Tank																1	
EQT0596	2-90(k) NVP/PVP Process Separation Vents																1	

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ID No.:	Description	LAC 33:III Chapter																
		5 <sup>1</sup>	9	11	13	15	2103	2107	2111	2113	2115	2122	2147	2149	2153	51*	56	59*
EQT0597	4-90 TK-190 Pyrrolidone Storage Tank						3									1		
EQT0598	5-90 PVP Spray Dryer Scrubber	1		1						3				1		1		
EQT0599	6-90 PVP-I Scrubber	1		1						3				2		1		
EQT0600	6-90(a) D-507A Intermediate Product Storage Tank										3					1		
EQT0601	6-90(b) D-507B Intermediate Product Storage Tank										3					1		
EQT0602	6-90(c) D-517A Intermediate Product Storage Tank										3					1		
EQT0603	6-90(d) D-517B Intermediate Product Storage Tank										3					1		
EQT0604	6-90(e) D-527A Intermediate Product Storage Tank										3					1		
EQT0605	6-90(f) R-500/510 PVP Reactor Trains											3				1		
EQT0606	6-90(g) D-501/511 Monomer Feed Drums											3				1		
EQT0607	6-90(h) D-505/515 PVP Initiator Feed Drums											3				1		
EQT0608	6-90(j) D-516 Formic Acid Storage Drum											3				1		
EQT0609	6-90(k) D-509 Triethylamine Storage Tank											3				3		
EQT0610	6-90(l) Z-559 Liquid PVP Drum Loading System											3				1		
EQT0611	6-90(m) PVP/PVP-I Transfer and Loading Operations												1					
EQT0612	6-90(n) PVP/PVP-I Transfer and Loading Operations												1					
EQT0613	6-90(o) PVP/PVP-I Transfer and Loading Operations												1					
EQT0614	6-90(p) PVP/PVP-I Transfer and Loading Operations												1					

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY****PYR/NVP/PVP/PVP-I Plants**

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ID No.:	Description	LAC 33:III.Chapter																
		5 <sup>1</sup>	9	11	13	15	2103	2107	2111	2113	2115	2122	2147	2149	2153	51*	56	59*
EQT0615	6-90(q) PVP/PVP-I Transfer and Loading Operations						1											
EQT0616	6-90(r) PVP/PVP-I Transfer and Loading Operations						1											
EQT0617	6-90(s) PVP/PVP-I Transfer and Loading Operations						1											
EQT0618	6-90(t) PVP/PVP-I Transfer and Loading Operations						1											
EQT0619	6-90(u) PVP/PVP-I Transfer and Loading Operations						1											
EQT0620	8-90 PYR/PVP Plants – Truck Loading Rack							3			1		3					1
FUG0024	9-90 PYR/NVP/PVP/PVP-I Plants – Fugitive Emissions								1									1
EQT0621	21-90 TK-293A Vinylpyrrolidone Storage Tank						3											1
EQT0622	22-90 TK-293B Vinylpyrrolidone Storage Tank						3											1
EQT0623	23-90 TK-285 Wastewater Tank						3				3							1
EQT0628	24-90 TK-390 Multi-purpose Tank						3											1
EQT0625	25-90 PYR/NVP/PVP/PVP-I Plants – Cooling Tower						1											1
EQT0626	PYR/NVP/PVP/PVP-I Plants Wastewater Streams																	3

<sup>1</sup> All LAC 33:III Chapter 5 citations are federally enforceable including LAC 33:III.501.C.6 citations, except when the requirement found in the “Specific Requirements” report specifically states that the regulation is State Only.

\* The regulations indicated above are State Only regulations.

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**KEY TO MATRIX**

- |   |  |
|---|--|
| 1 | -The regulations have applicable requirements that apply to this particular emission source.   |
|   | -The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.   |
| 2 | -The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date. |
| 3 | -The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.  |
- Blank – The regulations clearly do not apply to this type of emission source.

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**X. Table 1. Applicable Louisiana and Federal Air Quality Requirements**

ID No.:	Description	40 CFR 60 NSPS			40 CFR 61			40 CFR 63 NESHAP			40 CFR											
		A	Kb	VV	NNN	RRR	YYY	A	J	M	V	FF	A	F	G	H	Q	SS	FFFF	64	68	82
A12049	BASF – Geismar Site							1	1	1										1	1	
UNF0003	PYR/NVP/PVP/PVP-I Plants	1						3	3								3	3	1			
EQT0582	1-90 NVP Water Scrubber																			3		
EQT0583	1-90(a) NVP Distillation Vent																					
EQT0584	1-90(b) D-180A/B Pyrrolidone Check Tanks	3																				
EQT0585	1-90(c) D-272A/BX NVP Product Check Tanks	3																				
EQT0586	1-90(f) D-280/281 Inhibitor Drums	3																				
EQT0587	2-90 PYR/NVP/PVP Plants – Flare	1	1																	1		
EQT0588	2-90(c) TK-291 By-product Alcohol Tank	1																		3		
EQT0589	2-90(d) TK-292 NVP Residue Tank	1																		3		
EQT0590	2-90(e) TK-392A Multi-purpose Tank	3																		1		
EQT0591	2-90(f) TK-392B Multi-purpose Tank	3																		1		
EQT0592	2-90(g) TK-590 Isopropyl Alcohol Tank	3																		3		
EQT0593	2-90(h) TK-591 Multi-purpose Tank	1																		1		
EQT0594	2-90(i) TK-592 Vinyl Acetate Tank	1																		1		
EQT0595	2-90(j) TK-596 25% Aqueous Ammonia Tank	3																		3		
EQT0596	2-90(k) NVP/PVP Process Separation Vents																			3		

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		A	Kb	VV	NNN	RRR	YYY	A	J	M	V	FF	A	F	G	H	Q	SS	FFFF	64	68	82
EQT0597	4-90 TK-190 Pyrrolidone Storage Tank																			3		
EQT0598	5-90 PVP Spray Dryer Scrubber																			1		
EQT0599	6-90 PVP-I Scrubber																			1		
EQT0600	6-90(a) D-507A Intermediate Product Storage Tank																			3		
EQT0601	6-90(b) D-507B Intermediate Product Storage Tank																			3		
EQT0602	6-90(c) D-517A Intermediate Product Storage Tank																			3		
EQT0603	6-90(d) D-517B Intermediate Product Storage Tank																			3		
EQT0604	6-90(e) D-527A Intermediate Product Storage Tank																			3		
EQT0605	6-90(f) R-500/510 PVP Reactor Trains																			3		
EQT0606	6-90(g) D-501/511 Monomer Feed Drums																			3		
EQT0607	6-90(h) D-505/515 PVP Initiator Feed Drums																			3		
EQT0608	6-90(j) D-516 Formic Acid Storage Drum																			3		
EQT0609	6-90(k) D-509 Triethylamine Storage Tank																			1		
EQT0610	6-90(l) Z-559 Liquid PVP Drum Loading System																			1		
EQT0611	6-90(m) PVP/PVP-I Transfer and Loading Operations																			1		
EQT0612	6-90(n) PVP/PVP-I Transfer and Loading Operations																			1		
EQT0613	6-90(o) PVP/PVP-I Transfer and Loading Operations																			1		

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		A	Kb	VV	NNN	RRR	YYY	A	J	M	V	FFA	F	G	H	Q	SS	FFFF	64	68	82
EQT0614	6-90(p) PVP/PVP-I Transfer and Loading Operations																				1
EQT0615	6-90(q) PVP/PVP-I Transfer and Loading Operations																				1
EQT0616	6-90(r) PVP/PVP-I Transfer and Loading Operations																				1
EQT0617	6-90(s) PVP/PVP-I Transfer and Loading Operations																				1
EQT0618	6-90(t) PVP/PVP-I Transfer and Loading Operations																				1
EQT0619	6-90(u) PVP/PVP-I Transfer and Loading Operations																				1
EQT0620	8-90 PYR/PVP Plants – Truck Loading Rack																				1
FUG0024	9-90 PYR/NVP/PVP/PVP-I Plants – Fugitive Emissions																				1
EQT0621	21-90 TK-293A Vinylpyrrolidone Storage Tank																				3
EQT0622	22-90 TK-293B Vinylpyrrolidone Storage Tank																				3
EQT0623	23-90 TK-285 Wastewater Tank																				3
EQT0628	24-90 TK-390 Multi-purpose Tank																				1
EQT0625	25-90 PYR/NVP/PVP/PVP-I Plants – Cooling Tower																				1
EQT0626	PYR/NVP/PVP/PVP-I Plants Wastewater Streams																				1

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**KEY TO MATRIX**

- 1 - The regulations have applicable requirements that apply to this particular emission source.  
-The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 - The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 - The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

**Blank – The regulations clearly do not apply to this type of emission source.**

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**XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source**

TEMPO ID No:	Description	Requirement	Notes
UNF0003	PYR/NVP/PVP/PVP-I Plants	40 CFR 60 Subpart NNN Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	<b>DOES NOT APPLY.</b> The PYR/NVP/PVP/PVP-I Plants do not produce any of the chemicals listed in 40 CFR 60.667 as a product, co-product, by-product, or intermediate. [40 CFR 60.660(a)]
		40 CFR 60 Subpart RRR Standards of Performance for VOC Emissions From SOCMI Reactor Processes	<b>DOES NOT APPLY.</b> The PYR/NVP/PVP/PVP-I Plants do not produce any of the chemicals listed in 40 CFR 60.707 as a product, co-product, by-product, or intermediate. [40 CFR 60.700(a)]
EQT0582	1-90 NVP Water Scrubber	LAC 33:III.2115 Control of Emission of Organic Compounds – Waste Gas Disposal 40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants (NESHAP): Organic Chemical Manufacturing (MON)	<b>DOES NOT APPLY.</b> The final vent gas stream has a combined weight of VOC less than 100 pounds in any continuous 24-hour period. [LAC 33:III.2115.H.1.c] <b>DOES NOT APPLY.</b> Continuous process vents routed to this source do not contain any organic hazardous air pollutants (OHAPs).

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**XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source**

TEMPO ID No:	Description	Requirement	Notes
EQT0583	1-90(a) NVP Distillation Vent	LAC 33.III.2147 Limiting Volatile Organic Compound (VOC) Emissions from SOCMI Reactor Processes and Distillation Operations	DOES NOT APPLY. NVP is not a SOCMI chemical listed in Table 8 of Chapter 21, Appendix A.
EQT0584 EQT0585	1-90(b) D-180A/B Pyrrolidone Check Tanks 1-90(c) D-272A/BX NVP Product Check Tanks 1-90(f) D-280/281 Inhibitor Drums	LAC 33.III.2103 Control of Emission of Organic Compounds – Storage of VOCs	DOES NOT APPLY. The vapor pressures of the stored liquids are less than 1.5 psia. [LAC 33.III.2103.A]
EQT0586		40 CFR 60 Subpart Kb Standards of Performance for Volatile Organic Liquid (VOL) Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	DOES NOT APPLY. The volumes of these storage vessels are less than 75 cubic meters (19,813 gallons). [40 CFR 60.110b(a)]
EQT0587	2-90 PYR/NVP/PVP Plants - Flare	LAC 33.III.Chapter 15 Emission Standards for Sulfur Dioxide	DOES NOT APPLY. This Chapter does not apply to single point sources that emit or have the potential to emit less than 5 tons per year of sulfur dioxide into the atmosphere. [LAC 33.III.1502.A.3]
EQT0588 EQT0589	2-90(c) TK-291 By-product Alcohol Tank 2-90(d) TK-292 NVP Residue Tank	40 CFR 63 Subpart FFFF NESHAP: Miscellaneous Organic Chemical Manufacturing (MON)	DOES NOT APPLY. Tanks do not store OHAPs.

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**XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source**

<b>TEMPO ID No:</b>	<b>Description</b>	<b>Requirement</b>	<b>Notes</b>
EQT0590 EQT0591	2-90(e) TK-392A Multi-purpose Tank 2-90(f) TK-392B Multi-purpose Tank	40 CFR 60 Subpart Kb Standards of Performance for VOL Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	<b>DOES NOT APPLY.</b> The volumes of these storage vessels are less than 75 cubic meters (19,813 gallons). [40 CFR 60.110(b)(a)]
EQT0592	2-90(g) TK-590 Isopropyl Alcohol Tank	40 CFR 60 Subpart Kb Standards of Performance for VOL Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	<b>CONTROL REQUIREMENTS DO NOT APPLY.</b> Tanks are Group 2 storage tanks. Control requirements do not apply. Permittee shall comply with applicable recordkeeping and reporting requirements of this Subpart. [40 CFR 63.2470]
EQT0595	2-90(j) TK-596 25% Aqueous Ammonia Tank	40 CFR 63 Subpart FFFF NESHAP: Miscellaneous Organic Chemical Manufacturing (MON)	<b>DOES NOT APPLY.</b> This Subpart does not apply to storage vessels with a capacity greater than or equal to 75 m <sup>3</sup> (19,813 gallons) but less than 151 m <sup>3</sup> (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 15.0 kPa (2.18 psi). [40 CFR 60.110(b)(b)]
			Tank has a volume of 20,000 gallons and a vapor pressure less than 15.0 kPa.
		40 CFR 63 Subpart FFFF NESHAP: Miscellaneous Organic Chemical Manufacturing (MON)	<b>DOES NOT APPLY.</b> Tank does not store OHAPS.
		LAC 33:III.2103 Control of Emission of Organic Compounds – Storage of VOCs	<b>DOES NOT APPLY.</b> Tank does not store a VOC. [LAC 33:III.2103.A]

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**XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source**

<b>TEMPO ID No:</b>	<b>Description</b>	<b>Requirement</b>	<b>Notes</b>
(continued) EQT0595	2-90(j) TK-596 25% Aqueous Ammonia Tank	40 CFR 60 Subpart Kb Standards of Performance for VOL Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	DOES NOT APPLY. Tank is not in VOL service. [40 CFR 60.110(b)(a)]
EQT0596	2-90(k) NVP/PVP Process Separation Vents	40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants (NESHAP): Miscellaneous Organic Chemical Manufacturing (MON)	DOES NOT APPLY. Continuous process vents routed to this source do not contain any organic hazardous air pollutants (OHAPs).
EQT0597	4-90 TK-190 Pyrrolidone Storage Tank	LAC 33:III.2103 Control of Emission of Organic Compounds – Storage of VOCs	DOES NOT APPLY. The stored liquid has a vapor pressure less than 1.5 psia. [LAC 33:III.2103.B]
		40 CFR 60 Subpart Kb Standards of Performance for VOL Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	DOES NOT APPLY. This Subpart does not apply to storage vessels with a capacity greater than or equal to 151 m <sup>3</sup> (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 3.5 kPa (0.51 psi). [40 CFR 60.110(b)]
		40 CFR 63 Subpart FFFF NESHAP: Miscellaneous Organic Chemical Manufacturing (MON)	Tank has a volume of 50,000 gallons and a vapor pressure less than 3.5 kPa.
			DOES NOT APPLY. Tank does not store OHAPs.

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<b>TEMPO ID No:</b>	<b>Description</b>	<b>Requirement</b>	<b>Notes</b>
EQT0598	5-90 PVP Spray Dryer Scrubber	LAC 33:III.2115 Control of Emission of Organic Compounds – Waste Gas Disposal	DOES NOT APPLY. This Section does not apply to waste gas streams that are required by another federal or state regulation to implement controls that reduce VOC to a more stringent standard than would be required by this Section. [LAC 33:III.2115], [LAS 33:III.2149.A.1]
			This source is subject to LAC 33:III.2149
EQT0599	6-90 PVP-I Scrubber	LAC 33:III.2115 Control of Emission of Organic Compounds – Waste Gas Disposal	CONTROL REQUIREMENTS DO NOT APPLY. The process vents associated with batch operations contain less than 500 ppm(v) total VOC and therefore do not meet the definition of <i>Process Vent</i> as defined in LAC 33:III.2149.B.

			CONTROL REQUIREMENTS DO NOT APPLY. Total uncontrolled OHAP emissions are less than 10,000 lbs/yr. Therefore, this source meets the definition of a <i>Group 2 batch process vent</i> as defined in 40 CFR 63.2550. However, recordkeeping and reporting requirements do apply.
			DOES NOT APPLY. This Section does not apply to waste gas streams that are required by another federal or state regulation to implement controls that reduce VOC to a more stringent standard than would be required by this Section. [LAC 33:III.2115], [LAS 33:III.2149.A.1]

This source is subject to LAC 33:III.2149

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**XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source**

<b>ITEMPO ID No: (continued)</b>	<b>Description</b>	<b>Requirement</b>	<b>Notes</b>
EQT0599	6-90 PVP-I Scrubber	LAC 33:III.2149 Limiting VOC Emissions from Batch Processing	<b>EXEMPT.</b> Any batch process vent stream for which an existing combustion device or recovery device is employed to control VOC emissions is assumed to meet the 90% reduction requirement until the combustion device or recovery device is replaced for any reason. Such units are exempt from any monitoring, recordkeeping, and reporting requirements under this Subchapter. [LAC 33:III.2149.A.2.c]
EQT0600	6-90(a) Storage Tank	40 CFR 63 Subpart FFFF NESHAP: Miscellaneous Organic Chemical Manufacturing (MON)	<b>CONTROL REQUIREMENTS DO NOT APPLY.</b> Total uncontrolled OHAP emissions are less than 10,000 lbs/yr. Therefore, this source meets the definition of a <i>Group 2 batch process vent</i> as defined in 40 CFR 63.2550.
EQT0601	6-90(b) Storage Tank	D-507A Intermediate Product	<b>DOES NOT APPLY.</b> The stored liquids have vapor pressures of less than 1.5 psia. [LAC 33:III.2103.B]
EQT0602	6-90(c) Storage Tank	D-507B Intermediate Product	Control of Emission of Organic Compounds – Storage of VOCs
EQT0603	6-90(d) Storage Tank	D-517A Intermediate Product	
EQT0604	6-90(e) Storage Tank	D-517B Intermediate Product	
		D-527A Intermediate Product	

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<b>TEMPO ID No:</b>	<b>Description</b>	<b>Requirement</b>	<b>Notes</b>
<i>(continued)</i>			
EQT0600	6-90(a) D-507A Intermediate Product Storage Tank	40 CFR 60 Subpart Kb Standards of Performance for VOC Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	<b>DOES NOT APPLY.</b> This Subpart does not apply to storage vessels with a capacity greater than or equal to 75 m <sup>3</sup> (19,813 gallons) but less than 151 m <sup>3</sup> (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 15.0 kPa (2.18 psi). [40 CFR 60.110(b)]
EQT0601	6-90(b) D-507B Intermediate Product Storage Tank		Tanks have volumes of 20,800 gallons and a vapor pressure less than 15.0 kPa.
EQT0602	6-90(c) D-517A Intermediate Product Storage Tank		
EQT0603	6-90(d) D-517B Intermediate Product Storage Tank		
EQT0604	6-90(e) D-527A Intermediate Product Storage Tank	40 CFR 63 Subpart FFFF NESHAP: Miscellaneous Organic Chemical Manufacturing (MON)	<b>DOES NOT APPLY.</b> Tanks do not store OHAPs.
EQT0605	6-90(f) R-500/510 PVP Reactor Trains	40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants (NESHAP): Miscellaneous Organic Chemical Manufacturing (MON)	<b>DOES NOT APPLY.</b> Continuous process vents routed to this source do not contain any organic hazardous air pollutants (OHAPs).
EQT0606	6-90(g) D-501/511 Monomer Feed Drums	LAC 33:III.2103	<b>DOES NOT APPLY.</b> These storage vessels are pressure vessels capable of maintaining working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere. [LAC 33:III.2103.A]
EQT0607	6-90(h) D-505/515 PVP Initiator Feed Drums	Control of Emission of Organic Compounds – Storage of VOCs	
EQT0608	6-90(j) D-516 Formic Acid Storage Drum		

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**XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source**

TEMPO ID No: <i>(continued)</i>	Description	Requirement	Notes
EQT0606 EQT0607 EQT0608	6-90(g) D-501/511 Monomer Feed Drums 6-90(h) D-505/515 PVP Initiator Feed Drums 6-90(j) D-516 Formic Acid Storage Drum	40 CFR 60 Subpart Kb Standards of Performance for VOL Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	DOES NOT APPLY. The volumes of these storage vessels are less than 75 cubic meters (19,813 gallons). [40 CFR 60.110(b)(a)]
		40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants (NESHAP); Miscellaneous Organic Chemical Manufacturing (MON)	DOES NOT APPLY. D-501/511 and D-505/515 are surge control vessels; D-516 does not store any OHAPS.
EQT0609	6-90(k) D-509 Triethylamine Storage Tank	LAC 33:III.2103 Control of Emission of Organic Compounds – Storage of VOCs	DOES NOT APPLY. The volume of D-509 is less than 250 gallons. [LAC 33:III.2103.A]
		LAC 33:III.5109 Comprehensive TAP Emission Control Program	DOES NOT APPLY. D-509 emits triethylamine which is a supplemental air toxic as listed in LAC 33:III.5112, Table 51.3. MACT and Ambient Air Standards do not apply to pollutants listed in Table 51.3.
		40 CFR 60 Subpart Kb Standards of Performance for VOL Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	DOES NOT APPLY. The volume of D-509 is less than 75 cubic meters (19,813 gallons). [40 CFR 60.110(b)(a)]

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**XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source**

TEMPO ID No: <i>(continued)</i> EQT0609	Description	Requirement	Notes
	6-90(k) D-509 Triethylamine Storage Tank	40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants (NESHAP): Miscellaneous Manufacturing (MON)	<b>CONTROL REQUIREMENTS DO NOT APPLY.</b> Source is a Group 2 storage tank. Control requirements do not apply. Permittee shall comply with applicable recordkeeping and reporting requirements of this Subpart. [40 CFR 63.2470]
EQT0610	6-90(l) Z-559 Liquid PVP Drum Loading System	LAC 33:III.2107 Control of Emission of Organic Compounds: Volatile Organic Compounds - Loading	<b>DOES NOT APPLY.</b> The true vapor pressure of the material being loaded is less than 1.5 psia. [LAC 33:III.2107.A.1]
		40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants (NESHAP): Miscellaneous Manufacturing (MON)	<b>CONTROL REQUIREMENTS DO NOT APPLY.</b> Source is a Group 2 transfer rack. Control requirements do not apply. Permittee shall comply with applicable recordkeeping and reporting requirements of this Subpart. [40 CFR 63.2475]
EQT0611 Through EQT0619	6-90(m through u) PVP/PVP-I Transfer and Loading Operations	40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants (NESHAP): Miscellaneous Manufacturing (MON)	<b>CONTROL REQUIREMENTS DO NOT APPLY.</b> Sources are Group 2 transfer racks. Control requirements do not apply. Permittee shall comply with applicable recordkeeping and reporting requirements of this Subpart. [40 CFR 63.2475]
EQT0620	8-90 PYR/PVP Plants – Truck Loading Rack	LAC 33:III.2107 Control of Emission of Organic Compounds: Volatile Organic Compounds - Loading	<b>DOES NOT APPLY.</b> The true vapor pressure of the material being loaded is less than 1.5 psia. [LAC 33:III.2107.A.1]

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**XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source**

<b>TEMPO ID No: <i>(continued)</i></b>	<b>Description</b>	<b>Requirement</b>	<b>Notes</b>
EQT0620	8-90 PYR/PVP Plants – Truck Loading Rack	40 CFR 63 Subpart FFFF National Emission Standards for Hazardous Air Pollutants (NESHAP); Organic Chemical Manufacturing (MON)	<b>CONTROL REQUIREMENTS DO NOT APPLY.</b> Source is a Group 2 transfer rack. Control requirements do not apply. Permittee shall comply with applicable recordkeeping and reporting requirements of this Subpart. [40 CFR 63.2475]
FUG0024	9-90 PYR/NVP/PVP/PVP-I Plants – Fugitive Emissions	LAC 33:III.2121 Control of Emission of Organic Compounds - Fugitive Emission Control LAC 33:III.2122 Control of Emission of Organic Compounds - Fugitive Emission Control for Ozone Nonattainment Areas and Specified Parishes	<b>DOES NOT APPLY.</b> The PYR/NVP/PVP/PVP-I Plants do not meet the definition of a SOCMI facility as defined in LAC 33:III.111.
		40 CFR 60 Subpart VV Standards of Performance for Equipment Leaks of VOC in SOCMI	<b>DOES NOT APPLY.</b> The PYR/NVP/PVP/PVP-I Plants are not SOCMI facilities. Therefore, they are not affected facilities as specified in 40 CFR 60.480(a)(1) and are not regulated by this Subpart.
		40 CFR 61 Subpart V National Emission Standard for Equipment Leaks (Fugitive Emission Sources)	<b>DOES NOT APPLY.</b> This source does not emit any volatile hazardous air pollutant (VHAP) for which a standard under this Part has been promulgated. [40 CFR 61.240(a)]
EQT0621	21-90 TK-293A Vinylpyrrolidone Storage Tank	LAC 33:III.2103 Control of Emission of Organic Compounds – Storage of VOCs	<b>DOES NOT APPLY.</b> The stored liquids have vapor pressures of less than 1.5 psia. [LAC 33:III.2103.B]
EQT0622	22-90 TK-293B Vinylpyrrolidone Storage Tank		

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ITEM# ID No:	Description	Requirement	Notes
(continued) EQT0621 21-90 Tank	TK-293A Vinylpyrrolidone Storage	40 CFR 60 Subpart Kb Standards of Performance for VOL Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	<b>DOES NOT APPLY.</b> This Subpart does not apply to storage vessels with a capacity greater than or equal to 151 m <sup>3</sup> (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 3.5 kPa (0.51 psi). [40 CFR 60.110(b)]  Tanks have volumes of 50,000 gallons and a vapor pressure less than 3.5 kPa.
EQT0622 22-90 Tank	TK-293B Vinylpyrrolidone Storage	40 CFR 63 Subpart FFFF NESHAP: Miscellaneous Organic Chemical Manufacturing (MON)	<b>DOES NOT APPLY.</b> Tanks do not store OHAPs.
EQT0623 23-90	TK-285 Wastewater Tank	LAC 33:III.2103 Control of Emission of Organic Compounds – Storage of VOCs	<b>DOES NOT APPLY.</b> The stored liquid has a vapor pressure of less than 1.5 psia. [LAC 33:III.2103.A]
		40 CFR 60 Subpart Kb Standards of Performance for VOL Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	<b>DOES NOT APPLY.</b> This Subpart does not apply to storage vessels with a capacity greater than or equal to 75 m <sup>3</sup> (19,813 gallons) but less than 151 m <sup>3</sup> (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 15.0 kPa (2.18 psi). [40 CFR 60.110(b)]  Tank has a volume of 20,000 gallons and a vapor pressure less than 15.0 kPa.
		40 CFR 63 Subpart FFFF NESHAP: Miscellaneous Organic Chemical Manufacturing (MON)	<b>DOES NOT APPLY.</b> Tank does not store OHAPs.
EQT0628 24-90	TK-390 Multi-purpose Tank	LAC 33:III.2103 Control of Emission of Organic Compounds – Storage of VOCs	<b>DOES NOT APPLY.</b> The stored liquid has a vapor pressure of less than 1.5 psia. [LAC 33:III.2103.A]

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<b>TEMPO ID No:</b>	<b>Description</b>	<b>Requirement</b>	<b>Notes</b>
(continued) EQT0628	24-90 TK-390 Multi-purpose Tank	40 CFR 60 Subpart Kb Standards of Performance for VOL Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	DOES NOT APPLY. The volume of TK-390 is less than 75 cubic meters (19,813 gallons). [40 CFR 60.110b(a)] Tank volume is 10,000 gallons.
EQT0625	25-90 PYR/NVP/PVP/PVP-I Plants – Cooling Tower	40 CFR 63 Subpart Q NESHAP for Industrial Process Cooling Towers	DOES NOT APPLY. The PYR/NVP/PVP/PVP-I Plants do not use chromium based treatment chemicals in the cooling tower. [40 CFR 63.400(a)]
EQT0626	PYR/NVP/PVP/PVP-I Wastewater Streams	LAC 33:III.2153 Limiting VOC Emissions from Industrial Wastewater	DOES NOT APPLY. The wastewater streams do not meet the definition of <i>affected VOC wastewater</i> per LAC 33:III.2153.A.

The above table provides explanation for both the exemption status or non-applicability of a source cited by 1, 2 or 3 in the matrix presented in Section X (Table 1) of this permit.

## 40 CFR PART 70 GENERAL CONDITIONS

- A. The term of this permit shall be five (5) years from date of issuance. An application for a renewal of this 40 CFR Part 70 permit shall be submitted to the administrative authority no later than six months prior to the permit expiration date. Should a complete permit application not be submitted six months prior to the permit expiration date, a facility's right to operate is terminated pursuant to 40 CFR Section 70.7(c)(ii). Operation may continue under the conditions of this permit during the period of the review of the application for renewal. [LAC 33:III.507.E.1, E.3, E.4, reference 40 CFR 70.6(a)(2)]
- B. The conditions of this permit are severable; and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. [Reference 40 CFR 70.6(a)(5)]
- C. Permittee shall comply with all conditions of the 40 CFR Part 70 permit. Any permit noncompliance constitutes a violation of the Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [LAC 33:III.507.B.2, reference 40 CFR 70.6(a)(i) & (iii)]
- D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Reference 40 CFR 70.6(a)(6)(ii)]
- E. This permit does not convey any property rights of any sort, or an exclusive privilege. [Reference 40 CFR 70.6(a)(6)(iv)]
- F. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. A claim of confidentiality does not relieve the permittee of the requirement to provide the information. [LAC 33:III.507.B.2, 517.F, reference 40 CFR 70.6(a)(6)(v)]
- G. Permittee shall pay fees in accordance with LAC 33:III.Chapter 2 and 40 CFR Section 70.6(a)(7). [LAC 33:III.501.C.2, reference 40 CFR 70.6(a)(7)]
- H. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the permitting authority or authorized representative to perform the following:
  - 1. enter upon the permittee's premises where a 40 CFR Part 70 source is located or emission-related activity is conducted, or where records must be kept under the conditions of the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(i)];
  - 2. have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(ii)];

## 40 CFR PART 70 GENERAL CONDITIONS

3. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(iii)]; and
  4. as authorized by the Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(iv)]
- I. All required monitoring data and supporting information shall be kept available for inspection at the facility or alternate location approved by the agency for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Supporting information includes calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and all reports required by the permit.  
[Reference 40 CFR 70.6(a)(3)(ii)(B)]
- J. Records of required monitoring shall include the following:
1. the date, place as defined in the permit, and time of sampling or measurements;
  2. the date(s) analyses were performed;
  3. the company or entity that performed the analyses;
  4. the analytical techniques or methods used;
  5. the results of such analyses; and
  6. the operating conditions as existing at the time of sampling or measurement.
- [Reference 40 CFR 70.6(a)(3)(ii)(A)]
- K. Permittee shall submit at least semiannually, reports of any required monitoring, clearly identifying all instances of deviations from permitted monitoring requirements, certified by a responsible company official. For previously reported deviations, in lieu of attaching the individual deviation reports, the semiannual report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The semiannual reports shall be submitted to the Office of Environmental Compliance, Enforcement Division by March 31 for the preceding period encompassing July through December and September 30 for the preceding period encompassing January through June. Any quarterly deviation report required to be submitted by March 31 or September 30 in accordance with Part 70 General Condition R may be consolidated with the semi-annual reports required by this general condition as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. [LAC 33:III.507.H, reference 40 CFR 70.6(a)(3)(iii)(A)]
- L. The permittee shall submit at least semiannual reports on the status of compliance pursuant to 40 CFR Section 70.5 (c) (8) and a progress report on any applicable schedule of compliance pursuant to 40 CFR Section 70.6 (c) (4). [LAC 33:III.507.H.1, reference 40 CFR 70.6(c)(4)]
- M. Compliance certifications per LAC 33:III.507.H.5 shall be submitted to the Administrator as well as the permitting authority. For previously reported compliance deviations, in lieu of attaching the individual deviation reports, the annual report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The compliance certifications shall be submitted to the Office of Environmental Compliance, Enforcement Division by March 31 for the preceding calendar year. [LAC 33:III.507.H.5, reference 40 CFR 70.6(c)(5)(iv)]

## **40 CFR PART 70 GENERAL CONDITIONS**

- N. If the permittee seeks to reserve a claim of an affirmative defense as provided in LAC 33:III.507.J.2, the permittee shall, in addition to any emergency or upset provisions in any applicable regulation, notify the permitting authority within 2 working days of the time when emission limitations were exceeded due to the occurrence of an upset. In the event of an upset, as defined under LAC 33:III.507.J, which results in excess emissions, the permittee shall demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an emergency occurred and the cause was identified; 2) the permitted facility was being operated properly at the time; and 3) during the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standard or requirement of the permit. [LAC 33:III.507.J.2, reference 40 CFR 70.6(g)(3)(iv) & (i-iii)]
- O. Permittee shall maintain emissions at a level less than or equal to that provided for under the allowances that the 40 CFR Part 70 source lawfully holds under Title IV of the Clean Air Act or the regulations promulgated thereunder. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act. [Reference 40 CFR 70.6(a)(4)]
- P. Any permit issued pursuant to 40 CFR Part 70 may be subject to reopening prior to the expiration of the permit for any of the conditions specified in 40 CFR Section 70.7(f) or LAC 33:III.529. [LAC 33:III.529.A-B, reference 40 CFR 70.7(f)]
- Q. Permittee may request an administrative amendment to the permit to incorporate test results from compliance testing if the following criteria are met:
  1. the changes are a result of tests performed upon start-up of newly constructed, installed, or modified equipment or operations;
  2. increases in permitted emissions will not exceed five tons per year for any regulated pollutant;
  3. increases in permitted emissions of Louisiana toxic air pollutants or of federal hazardous air pollutants would not constitute a modification under LAC 33:III. Chapter 51 or under Section 112 (g) of the Clean Air Act;
  4. changes in emissions would not require new source review for prevention of significant deterioration or nonattainment and would not trigger the applicability of any federally applicable requirement;
  5. changes in emissions would not qualify as a significant modification; and
  6. the request is submitted no later than 12 months after commencing operation. [LAC 33:III.523.A, reference 40 CFR 70.7(d)]
- R. Permittee shall submit prompt reports of all permit deviations as specified below to the Office of Environmental Compliance, Enforcement Division. All such reports shall be certified by a responsible official in accordance with 40 CFR 70.5(d).

## 40 CFR PART 70 GENERAL CONDITIONS

1. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33.I.Chapter 39.
  2. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.
  3. A written report shall be submitted quarterly to address all permit deviations not included in paragraphs 1 or 2 above. Unless required by an applicable reporting requirement, a written report is not required during periods in which there is no deviation. The quarterly deviation reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by Part 70 General Condition K as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. For previously reported permit deviations, in lieu of attaching the individual deviation reports, the quarterly report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any permit deviations occurring during the corresponding specified calendar quarter:
    - a. Report by June 30 to cover January through March
    - b. Report by September 30 to cover April through June
    - c. Report by December 31 to cover July through September
    - d. Report by March 31 to cover October through December
  4. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided such reports are certified in accordance with 40 CFR 70.5(d) and contain all information relevant to the permit deviation. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107. [Reference 40 CFR 70.6(a)(3)(iii)(B)]
- S. Permittee shall continue to comply with applicable requirements on a timely basis, and will meet on a timely basis applicable requirements that become effective during the permit term. [Reference 40 CFR 70.5(c)(8)(iii)]
- T. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156;
  2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158;
  3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161;

## 40 CFR PART 70 GENERAL CONDITIONS

4. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to 40 CFR 82.166. ("MVAC-like appliance" as defined at 40 CFR 82.152);
  5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 82.156; and
  6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166. [Reference 40 CFR 82, Subpart F]
- U. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
- The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant. [Reference 40 CFR 82, Subpart B]
- V. Data availability for continuous monitoring or monitoring to collect data at specific intervals: Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the emissions unit is operating. For purposes of reporting monitoring deviations under Part 70 General Conditions K and R, and unless otherwise provided for in the Specific Requirements (or Table 3) of this permit, the minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored. This condition does not apply to Leak Detection and Repair (LDAR) programs for fugitive emissions (e.g., 40 CFR 60 Subpart VV, 40 CFR 63 Subpart H).

**LOUISIANA AIR EMISSION PERMIT  
GENERAL CONDITIONS**

- I. This permit is issued on the basis of the emissions reported in the application for approval of emissions and in no way guarantees that the design scheme presented will be capable of controlling the emissions to the type and quantities stated. Failure to install, properly operate and/or maintain all proposed control measures and/or equipment as specified in the application and supplemental information shall be considered a violation of the permit and LAC 33:III.501. If the emissions are determined to be greater than those allowed by the permit (e.g. during the shakedown period for new or modified equipment) or if proposed control measures and/or equipment are not installed or do not perform according to design efficiency, an application to modify the permit must be submitted. All terms and conditions of this permit shall remain in effect unless and until revised by the permitting authority.
- II. The permittee is subject to all applicable provisions of the Louisiana Air Quality Regulations. Violation of the terms and conditions of the permit constitutes a violation of these regulations.
- III. The Emission Rates for Criteria Pollutants, Emission Rates for TAP/HAP & Other Pollutants, and Specific Requirements sections or, where included, Emission Inventory Questionnaire sheets establish the emission limitations and are a part of the permit. Any operating limitations are noted in the Specific Requirements or, where included, Tables 2 and 3 of the permit. The synopsis is based on the application and Emission Inventory Questionnaire dated October 12, 2006. A permit application addendum dated December 28, 2007 was submitted by BASF, but it was rescinded on February 8, 2008.
- IV. This permit shall become invalid, for the sources not constructed, if:
  - A. Construction is not commenced, or binding agreements or contractual obligations to undertake a program of construction of the project are not entered into, within two (2) years (18 months for PSD permits) after issuance of this permit, or;
  - B. If construction is discontinued for a period of two (2) years (18 months for PSD permits) or more.The administrative authority may extend this time period upon a satisfactory showing that an extension is justified.  
This provision does not apply to the time period between construction of the approved phases of a phased construction project. However, each phase must commence construction within two (2) years (18 months for PSD permits) of its projected and approved commencement date.
- V. The permittee shall submit semiannual reports of progress outlining the status of construction, noting any design changes, modifications or alterations in the construction schedule which have or may have an effect on the emission rates or ambient air quality levels. These reports shall continue to be submitted until such time as construction is certified as being complete. Furthermore, for any significant change in the design, prior approval shall be obtained from the Office of Environmental Services, Air Permits Division.
- VI. The permittee shall notify the Department of Environmental Quality, Office of Environmental Services, Air Permits Division within ten (10) calendar days from the date that construction is certified as complete and the estimated date of start-up of operation. The appropriate Regional Office shall also be so notified within the same time frame.

**LOUISIANA AIR EMISSION PERMIT  
GENERAL CONDITIONS**

- VII. Any emissions testing performed for purposes of demonstrating compliance with the limitations set forth in paragraph III shall be conducted in accordance with the methods described in the Specific Conditions and, where included, Tables 1, 2, 3, 4, and 5 of this permit. Any deviation from or modification of the methods used for testing shall have prior approval from the Office of Environmental Assessment, Air Quality Assessment Division.
- VIII. The emission testing described in paragraph VII above, or established in the specific conditions of this permit, shall be conducted within sixty (60) days after achieving normal production rate or after the end of the shakedown period, but in no event later than 180 days after initial start-up (or restart-up after modification). The Office of Environmental Assessment, Air Quality Assessment Division shall be notified at least (30) days prior to testing and shall be given the opportunity to conduct a pretest meeting and observe the emission testing. The test results shall be submitted to the Air Quality Assessment Division within sixty (60) days after the complete testing. As required by LAC 33.III.913, the permittee shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.
- IX. The permittee shall, within 180 days after start-up and shakedown of each project or unit, report to the Office of Environmental Compliance, Enforcement Division any significant difference in operating emission rates as compared to those limitations specified in paragraph III. This report shall also include, but not be limited to, malfunctions and upsets. A permit modification shall be submitted, if necessary, as required in Condition I.
- X. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of at least five (5) years.
- XI. If for any reason the permittee does not comply with, or will not be able to comply with, the emission limitations specified in this permit, the permittee shall provide the Office of Environmental Compliance, Enforcement Division with a written report as specified below.
- A. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33.I.Chapter 39.
  - B. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.
  - C. A written report shall be submitted quarterly to address all emission limitation exceedances not included in paragraphs A or B above. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any emission limitation exceedances occurring during the corresponding specified calendar quarter:
    1. Report by June 30 to cover January through March
    2. Report by September 30 to cover April through June
    3. Report by December 31 to cover July through September
    4. Report by March 31 to cover October through December

**LOUISIANA AIR EMISSION PERMIT  
GENERAL CONDITIONS**

- D. Each report submitted in accordance with this condition shall contain the following information:
1. Description of noncomplying emission(s);
  2. Cause of noncompliance;
  3. Anticipated time the noncompliance is expected to continue, or if corrected, the duration of the period of noncompliance;
  4. Steps taken by the permittee to reduce and eliminate the noncomplying emissions; and
  5. Steps taken by the permittee to prevent recurrences of the noncomplying emissions.
- E. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided all information specified above is included. For Part 70 sources, reports submitted in accordance with Part 70 General Condition R shall serve to meet the requirements of this condition provided all specified information is included. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107.
- XII. Permittee shall allow the authorized officers and employees of the Department of Environmental Quality, at all reasonable times and upon presentation of identification, to:
- A. Enter upon the permittee's premises where regulated facilities are located, regulated activities are conducted or where records required under this permit are kept;
  - B. Have access to and copy any records that are required to be kept under the terms and conditions of this permit, the Louisiana Air Quality Regulations, or the Act;
  - C. Inspect any facilities, equipment (including monitoring methods and an operation and maintenance inspection), or operations regulated under this permit; and
  - D. Sample or monitor, for the purpose of assuring compliance with this permit or as otherwise authorized by the Act or regulations adopted thereunder, any substances or parameters at any location.
- XIII. If samples are taken under Section XII.D. above, the officer or employee obtaining such samples shall give the owner, operator or agent in charge a receipt describing the sample obtained. If requested prior to leaving the premises, a portion of each sample equal in volume or weight to the portion retained shall be given to the owner, operator or agent in charge. If an analysis is made of such samples, a copy of the analysis shall be furnished promptly to the owner, operator or agency in charge.
- XIV. The permittee shall allow authorized officers and employees of the Department of Environmental Quality, upon presentation of identification, to enter upon the permittee's premises to investigate potential or alleged violations of the Act or the rules and regulations adopted thereunder. In such investigations, the permittee shall be notified at the time entrance is requested of the nature of the suspected violation. Inspections under this subsection shall be limited to the aspects of alleged violations. However, this shall not in any way preclude prosecution of all violations found.

## **LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS**

- XV. The permittee shall comply with the reporting requirements specified under LAC 33:III.919 as well as notification requirements specified under LAC 33:III.927.
- XVI. In the event of any change in ownership of the source described in this permit, the permittee and the succeeding owner shall notify the Office of Environmental Services in accordance with LAC 33:I.Chapter 19.Facility Name and Ownership/Operator Changes Process.
- XVII. Very small emissions to the air resulting from routine operations, that are predictable, expected, periodic, and quantifiable and that are submitted by the permitted facility and approved by the Air Permits Division are considered authorized discharges. Approved activities are noted in the General Condition XVII Activities List of this permit. To be approved as an authorized discharge, these very small releases must:

1. Generally be less than 5 TPY
2. Be less than the minimum emission rate (MER)
3. Be scheduled daily, weekly, monthly, etc., or
4. Be necessary prior to plant startup or after shutdown [line or compressor pressuring/depressuring for example]

These releases are not included in the permit totals because they are small and will have an insignificant impact on air quality. This general condition does not authorize the maintenance of a nuisance, or a danger to public health and safety. The permitted facility must comply with all applicable requirements, including release reporting under LAC 33:I.3901.

- XVIII. Provisions of this permit may be appealed in writing pursuant to La. R.S. 30:2024(A) within 30 days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the secretary or the assistant secretary elects to suspend other provisions as well. Construction cannot proceed except as specifically approved by the secretary or assistant secretary. A request for hearing must be sent to the following:

Attention: Office of the Secretary, Legal Services Division  
La. Dept. of Environmental Quality  
Post Office Box 4302  
Baton Rouge, Louisiana 70821-4302

- XIX. For Part 70 sources, certain Part 70 general conditions may duplicate or conflict with state general conditions. To the extent that any Part 70 conditions conflict with state general conditions, then the Part 70 general conditions control. To the extent that any Part 70 general conditions duplicate any state general conditions, then such state and Part 70 provisions will be enforced as if there is only one condition rather than two conditions.

INVENTORIES

AI ID: 2049 - BASF Corp - Geismar Site  
 Activity Number: PER20060028  
 Permit Number: 2039-V1  
 Air - Title V Regular Permit Renewal

## Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
<b>PYR/NVP/PVP/PVP-I Plants</b>						
EQT0582	1-90 - NVP Water Scrubber			20 gallons/hr		8760 hr/yr (All Year)
EQT0583	1-90(a) - NVP Distillation Vent					8760 hr/yr (All Year)
EQT0584	1-90(b) - D-180A/B Pyrrolidone Check Tanks					8760 hr/yr (All Year)
EQT0585	1-90(c) - D-272A/BX NVP Product Check Tanks					8760 hr/yr (All Year)
EQT0586	1-90(f) - D-280/281 Inhibitor Drums					8760 hr/yr (All Year)
EQT0587	2-90 - PYR/NVP/PVP Plants - Flare		3.27 MM BTU/hr			8760 hr/yr (All Year)
EQT0588	2-90(c) - TK-291 By-product Alcohol Tank	20000 gallons				8760 hr/yr (All Year)
EQT0589	2-90(d) - TK-292 NVP Residue Tank	20000 gallons				8760 hr/yr (All Year)
EQT0590	2-90(e) - TK-392A Multi-purpose Tank					8760 hr/yr (All Year)
EQT0591	2-90(f) - TK-392B Multi-purpose Tank					8760 hr/yr (All Year)
EQT0592	2-90(g) - TK-591 Isopropyl Alcohol Tank	20000 gallons				8760 hr/yr (All Year)
EQT0593	2-90(h) - TK-591 Multi-purpose Tank					8760 hr/yr (All Year)
EQT0594	2-90(i) - TK-592 Vinyl Acetate Tank	20000 gallons				8760 hr/yr (All Year)
EQT0595	2-90(j) - TK-596 25% Aqueous Ammonia Tank	.				8760 hr/yr (All Year)
EQT0596	2-90(k) - NVP/PVP Process Separation Vents	50000 gallons				8760 hr/yr (All Year)
EQT0597	2-90 - TK-190 Pyrrolidone Storage Tank			15000 kg/hr		8760 hr/yr (All Year)
EQT0598	5-90 - PVP Spray Dryer Scrubber			25000 kg/hr		8760 hr/yr (All Year)
EQT0599	6-90 - PVP-I Scrubber					8760 hr/yr (All Year)
EQT0600	6-90(a) - D-507A Intermediate Product Storage Tank					8760 hr/yr (All Year)
EQT0601	6-90(b) - D-507B Intermediate Product Storage Tank					8760 hr/yr (All Year)
EQT0602	6-90(c) - D-517A Intermediate Product Storage Tank					8760 hr/yr (All Year)
EQT0603	6-90(d) - D-517B Intermediate Product Storage Tank					8760 hr/yr (All Year)
EQT0604	6-90(e) - D-527A Intermediate Product Storage Tank					8760 hr/yr (All Year)
EQT0605	6-90(f) - R-501/510 PVP Reactor Trains					8760 hr/yr (All Year)
EQT0606	6-90(g) - D-51/511 Monomer Feed Drums					8760 hr/yr (All Year)
EQT0607	6-90(h) - D-503/515 PVP Initiator Feed Drums					8760 hr/yr (All Year)
EQT0608	6-90(j) - D-516 Formic Acid Storage Drum					8760 hr/yr (All Year)
EQT0609	6-90(k) - D-509 Triethylamine Storage Tank					8760 hr/yr (All Year)
EQT0610	6-90(l) - Z-559 Liquid PVP Drum Loading System					8760 hr/yr (All Year)
EQT0611	6-90(m) - PVP/PVP-I Transfer and Loading Operations					8760 hr/yr (All Year)
EQT0612	6-90(n) - PV/PVPV-P-I Transfer and Loading Operations					8760 hr/yr (All Year)
EQT0613	6-90(o) - P'VP/PVP-I Transfer and Loading Operations					8760 hr/yr (All Year)
EQT0614	6-90(p) - PV/PVPV-P-I Transfer and Loading Operations					8760 hr/yr (All Year)
EQT0615	6-90(q) - PV/PVPV-P-I Transfer and Loading Operations					8760 hr/yr (All Year)
EQT0616	6-90(r) - PVPV/PVP-I Transfer and Loading Operations					8760 hr/yr (All Year)
EQT0617	6-90(s) - PV/PVPV-P-I Transfer and Loading Operations					8760 hr/yr (All Year)
EQT0618	6-90(t) - PV/PVPV-P-I Transfer and Loading Operations					8760 hr/yr (All Year)
EQT0619	6-90(u) - PV/PVPV-P-I Transfer and Loading Operations					8760 hr/yr (All Year)
EQT0620	8-90 - PYR/PVP Plants - Truck Loading Rack			849227 gallons/yr		8760 hr/yr (All Year)
EQT0621	21-90 - TK-293A Vinylpyrrolidone Storage Tank	50000 gallons				8760 hr/yr (All Year)

INVENTORIES

**AI ID: 2049 - BASF Corp - Geismar Site**  
**Activity Number: PER20060028**  
**Permit Number: 2039-V1**  
**Air - Title V Regular Permit Renewal**

## Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
<b>PYR/NVP/PVP/PVP-I Plants</b>						
EQT0622	22-90 - TK-293B Vinylpyrrolidone Storage Tank	50000 gallons				8760 hr/yr (All Year)
EQT0623	23-90 - TK-285 Wastewater Tank	20000 gallons				8760 hr/yr (All Year)
EQT0625	25-90 - PYR/NVP/PVP/PVP-I Plants - Cooling Tower			5000 gallons/min		8760 hr/yr (All Year)
EQT0626	WW Streams - PYR/NVP/PVP/PVP-I/Wastewater Streams					8760 hr/yr (All Year)
EQT0628	24-90 - TK-390 Multi-purpose Tank	10000 gallons				8760 hr/yr (All Year)
FUG0024	9-90 - PYR/NVP/PVP/PVP/PVP-I Plants - Fugitive Emissions					8760 hr/yr (All Year)

## Stack Information:

ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (°F)
<b>PYR/NVP/PVP/PVP-I Plants</b>							
EQT0582	1-90 - NVP Water Scrubber	15.4	21	.17		110	100
EQT0587	2-90 - PYR/NVP/PVP Plants - Flare	.53	6.25	.35		35	1013
EQT0597	4-90 - TK-190 Pyrrolidone Storage Tank					25	
EQT0598	5-90 - PVP Spray Dryer Scrubber	26.2	30880	.5		115	114
EQT0599	6-90 - PVP-I Scrubber	412	4850	.5		115	100
EQT0621	21-90 - TK-293A Vinylpyrrolidone Storage Tank			.8		25	
EQT0622	22-90 - TK-293B Vinylpyrrolidone Storage Tank			.08		25	
EQT0623	23-90 - TK-285 Wastewater Tank					25	
EQT0625	25-90 - PYR/NVP/PVP/PVP-I Plants - Cooling Tower					24	
EQT0628	24-90 - TK-390 Multi-purpose Tank					11	

## Relationships:

ID	Description	Relationship	ID	Description
EQT0582	1-90 NVP Water Scrubber	Controls emissions from	EQT0583	1-90(a) NVP Distillation Vent
EQT0582	1-90 NVP Water Scrubber	Controls emissions from	EQT0584	1-90(b) D-180/A/B Pyrrolidone Check Tanks
EQT0582	1-90 NVP Water Scrubber	Controls emissions from	EQT0585	1-90(c) D-272/A/B/X NVP Product Check Tanks
EQT0582	1-90 NVP Water Scrubber	Controls emissions from	EQT0586	1-90(f) D-280/281 Inhibitor Drums
EQT0587	2-90 PYR/NVP/PVP Plants - Flare	Controls emissions from	EQT0588	2-90(c) TK-291 By-product Alcohol Tank
EQT0587	2-90 PYR/NVP/PVP Plants - Flare	Controls emissions from	EQT0589	2-90(d) TK-292 NVP Residue Tank
EQT0587	2-90 PYR/NVP/PVP Plants - Flare	Controls emissions from	EQT0590	2-90(e) TK-352A Multi-purpose Tank
EQT0587	2-90 PYR/NVP/PVP Plants - Flare	Controls emissions from	EQT0591	2-90(f) TK-392B Multi-purpose Tank
EQT0587	2-90 PYR/NVP/PVP Plants - Flare	Controls emissions from	EQT0592	2-90(g) TK-590 Isopropyl Alcohol Tank
EQT0587	2-90 PYR/NVP/PVP Plants - Flare	Controls emissions from	EQT0593	2-90(h) TK-591 Multi-purpose Tank
EQT0587	2-90 PYR/NVP/PVP Plants - Flare	Controls emissions from	EQT0594	2-90(i) TK-592 Vinyl Acetate Tank
EQT0587	2-90 PYR/NVP/PVP Plants - Flare	Controls emissions from	EQT0595	2-90(j) TK-596 25% Aqueous Ammonia Tank

**INVENTORIES**

A IID: 2049 - BASF Corp - Geismar Site  
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**Relationships:**

ID	Description	Relationship	ID	Description
EQT0587	2-90 PYR/NVP/PVP Plants - Flare	Controls emissions from	EQT0596	2-90(k) NVP/PVP Process Separation Vents
EQT0599	6-90 PVP-I Scrubber	Controls emissions from	EQT0600	6-90(a) D-507A Intermediate Product Storage Tank
EQT0599	6-90 PVP-I Scrubber	Controls emissions from	EQT0601	6-90(b) D-507B Intermediate Product Storage Tank
EQT0599	6-90 PVP-I Scrubber	Controls emissions from	EQT0602	6-90(c) D-517A Intermediate Product Storage Tank
EQT0599	6-90 PVP-I Scrubber	Controls emissions from	EQT0603	6-90(d) D-517B Intermediate Product Storage Tank
EQT0599	6-90 PVP-I Scrubber	Controls emissions from	EQT0604	6-90(e) D-527A Intermediate Product Storage Tank
EQT0599	6-90 PVP-I Scrubber	Controls emissions from	EQT0605	6-90(f) R-500/510 PVP Reactor Trains
EQT0599	6-90 PVP-I Scrubber	Controls emissions from	EQT0606	6-90(g) D-501/511 Monomer Feed Drums
EQT0599	6-90 PVP-I Scrubber	Controls emissions from	EQT0607	6-90(h) D-505/515 PVP Initiator Feed Drums
EQT0599	6-90 PVP-I Scrubber	Controls emissions from	EQT0608	6-90(j) D-516 Formic Acid Storage Drum
EQT0599	6-90 PVP-I Scrubber	Controls emissions from	EQT0609	6-90(k) D-509 Triethylamine Storage Tank
EQT0599	6-90 PVP-I Scrubber	Controls emissions from	EQT0610	6-90(l) Z-559 Liquid PVP Drum Loading System

**Subject Item Groups:**

ID	Group Type	Group Description
UNF0003	Unit or Facility Wide	UNF003 - PYR/NVP/PVP/PVP-I Plants

**Group Membership:**

**NOTE:** The UNF group relationship is not printed in this table. Every subject item is a member of the UNF group

**Annual Maintenance Fee:**

Fee Number	Air Contaminant Source	Multiplier	Units Of Measure
0630	Organic Oxides, Alcohols, Glycols (Rated Capacity)	73	MM Lb/Yr
2834	Pharmaceutical preparations	AI2049	UNF003
2869	Industrial organic chemicals, nec		

**EMISSION RATES FOR CRITERIA POLLUTANTS**

AI ID: 2049 - BASF Corp - Geismar Site  
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Subject Item	CO			NOx			PM10			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year												
<b>PYRINVP/PVP/PVP-I Plants</b>															
EQT 0582 1-90															
EQT 0587 2-90	1.42	2.13	6.23	0.26	0.39	1.15	0.02	0.03	0.07	0.001	0.003	0.01	0.34	1.99	1.47
EQT 0597 4-90													0.01	0.34	0.03
EQT 0598 5-90							1.50	1.57	6.58				4.91	21.49	21.50
EQT 0599 6-90							0.17	0.23	0.73				0.02	2.72	0.10
EQT 0620 8-90													0.005	0.345	0.02
EQT 0621 21-90													0.003	0.10	0.01
EQT 0622 22-90													0.003	0.10	0.01
EQT 0623 23-90													<0.001	<0.001	<0.001
EQT 0625 25-90							0.25	0.25	1.10				0.01	0.01	0.05
EQT 0628 24-90													0.002	0.002	0.009
FUG 0024 9-90													0.63	0.63	2.74

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote.

**EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS**

AI ID: 2049 - BASF Corp - Geismar Site

Activity Number: PER20060028

Permit Number: 2039-V1

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Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0587 2-90	Ammonia	0.26	4.76	1.14
	Formaldehyde	< 0.001	< 0.001	< 0.001
	Vinyl acetate	0.002	1.30	0.01
	n-Hexane	0.004	0.01	0.02
EQT 0598 5-90	Acetaldehyde	0.27	0.39	1.18
	Ammonia	1.96	8.61	8.60
	Triethyl amine	0.35	1.45	1.54
EQT 0599 6-90	Ammonia	0.04	3.82	0.17
	Triethyl amine	< 0.001	0.40	< 0.001
	Vinyl acetate	< 0.001	0.15	0.002
EQT 0623 23-90	Ammonia	0.01	0.02	0.05
EQT 0625 25-90	Chlorine	0.005	0.005	0.02
EQT 0628 24-90	Ammonia	< 0.001	0.001	0.002
FUG 0024 9-90	Acetaldehyde	0.001	0.001	0.003
	Triethyl amine	0.01	0.01	0.03
	Vinyl acetate	0.03	0.03	0.12
UNF 0003 UNF003	Acetaldehyde			1.18
	Ammonia			9.96
	Chlorine			0.02
	Formaldehyde			0.001
	Triethyl amine			1.57
	Vinyl acetate			0.13
	n-Hexane			0.02

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

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**AI2049      BASF - Geismar Site**

- 1 [40 CFR 61.145(b)(1)] Provide DEQ with written notice of intention to demolish or remove prior to performing activities to which 40 CFR 61 Subpart M applies. Delivery of the notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable. Subpart M. [40 CFR 61.145(b)(1)]
- 2 [40 CFR 61.148] Do not install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. Subpart M.
- 3 [40 CFR 61.342(b)(2)] As part of the waiver application submitted under 40 CFR 61.342(b)(1), the owner or operator shall submit to the DEQ a plan under 40 CFR 61.10(b)(3) that is an enforceable commitment to obtain environmental benefits to mitigate the benzene emissions that result from extending the compliance date. The plan shall include the information specified in 40 CFR 61.342(b)(2)(i-iii). [40 CFR 61.342(b)(2)]
- 4 [40 CFR 61.342(c)] Comply with the requirements of 40 CFR 61.342(c) through (h) no later than 90 days following the effective date, unless a waiver of compliance has been obtained under 40 CFR 61.11, or by the initial startup for a new source with an initial startup after the effective date. Subpart FF. [40 CFR 61.342(b)]
- 5 [40 CFR 61.342(c)(1)(i)] Waste streams containing benzene: Remove or destroy the benzene contained in the waste using a treatment process or wastewater treatment system that complies with the standards specified in 40 CFR 61.348. Subpart FF. [40 CFR 61.342(c)(1)(i)]
- 6 [40 CFR 61.355] Determine compliance with 40 CFR 61 Subpart FF using the test methods and procedures specified in 40 CFR 61.355(a) through (i), as applicable. Subpart FF.
- 7 [40 CFR 61.356] Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 61.356(a) through (n), as applicable. Maintain each record in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified. Subpart FF.
- 8 [40 CFR 61.357(a)] Submit report: Due within 90 days after January 7, 1993. Submit a report that summarizes the regulatory status of each waste stream subject to 40 CFR 61.342 and is determined by the procedures specified in 40 CFR 61.355(c) to contain benzene. Include the information specified in 40 CFR 61.357(a)(1) through (a)(4). If there is no benzene onsite in wastes, products, by-products, or intermediates, submit an initial report that is a statement to this effect. Subpart FF. [40 CFR 61.357(a)]
- 9 [40 CFR 61.357(d)(1)] Submit report: Due within 90 days after January 7, 1993. Submit a certification that the equipment necessary to comply with 40 CFR 61 Subpart FF has been installed and that the required initial inspections or tests have been carried out in accordance with 40 CFR 61 Subpart FF.
- 10 [40 CFR 61.357(d)(2)] Submit report: Due annually, beginning on the date that equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Submit updates to the information listed in 40 CFR 61.357(a)(1) through (a)(3) or, if the information in 40 CFR 61.357(a)(1) through (3) is not changed in the following year, a statement to that effect. Subpart FF. [40 CFR 61.357(d)(2)]
- 11 [40 CFR 61.357(d)(6)] Submit report: Due quarterly, beginning three months after the date that the equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Submit a certification that all of the required inspections have been carried out in accordance with the requirements of 40 CFR 61 Subpart FF. Subpart FF. [40 CFR 61.357(d)(6)]
- 12 [40 CFR 61.357(d)(7)] Submit report: Due quarterly, beginning three months after the date that the equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Include the information specified in 40 CFR 61.357(d)(7)(i) through (d)(7)(v). Subpart FF. [40 CFR 61.357(d)(7)]
- 13 [40 CFR 61.357(d)(8)] Submit report: Due annually, beginning one year after the date that the equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Submit a report that summarizes all inspections required by 40 CFR 61.342 through 61.354 during which detectable emissions are measured or a problem that could result in benzene emissions is identified, including information about the repairs or corrective action taken. Subpart FF. [40 CFR 61.357(d)(8)]

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**AI2049 BASF - Geismar Site**

- 14 [40 CFR 61.] All affected facilities shall comply with all applicable provisions in 40 CFR 61 Subpart A.
- 15 [40 CFR 70.5(a)(1)(iii)] Submit Title V permit application for renewal: Due 6 months before permit expiration date. [40 CFR 70.5(a)(1)(iii)]
- 16 [40 CFR 70.6(a)(3)(iii)(A)] Submit Title V monitoring results report: Due semiannually, by March 31st and September 30th for the preceding periods encompassing July through December and January through June, respectively. Submit reports to the Office of Environmental Compliance, Surveillance Division. Certify reports by a responsible company official. Clearly identify all instances of deviations from permitted monitoring requirements. For previously reported deviations, in lieu of attaching the individual deviation reports, clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. [40 CFR 70.6(a)(3)(iii)(A)]
- 17 [40 CFR 70.6(a)(3)(iii)(B)] Submit Title V excess emissions report: Due quarterly, by June 30, September 30, December 31, March 31. Submit reports of all permit deviations to the Office of Environmental Compliance, Surveillance Division. Certify all reports by a responsible official in accordance with 40 CFR 70.5(d). The reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by 40 CFR 70.6(a)(3)(iii)(A) as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. Unless required by an applicable reporting requirement, a written report is not required during periods in which there is no deviation. [40 CFR 70.6(a)(3)(iii)(B)]
- 18 [40 CFR 70.6(c)(5)(iv)] Submit Title V compliance certification: Due annually, by the 31st of March. Submit to the Office of Environmental Compliance, Surveillance Division. [40 CFR 70.6(c)(5)(iv)]
- 19 [40 CFR 82 Subpart F] Comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B.
- 20 [LAC 33:III.1103] Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensify an existing traffic hazard condition are prohibited.
- 21 [LAC 33:III.1109.B] Outdoor burning of waste material or other combustible material is prohibited.
- 22 [LAC 33:III.1303.B] Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.
- 23 [LAC 33:III.2113.A] Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A-1-5.
- 24 [LAC 33:III.2191] Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.
- 25 [LAC 33:III.2901.D] Discharges of odor substances at or beyond property lines which cause a perceived odor intensity of six or greater on the specified eight point butanol scale as determined by Method 41 of LAC 33:III.2901.G are prohibited.
- 26 [LAC 33:III.2901.F] If requested to monitor for odor intensity, take and transport samples in a manner which minimizes alteration of the samples either by contamination or loss of material. Evaluate all samples as soon after collection as possible in accordance with the procedures set forth in LAC 33:III.2901.G.
- 27 [LAC 33:III.501.C.6] Maintain best practical housekeeping and maintenance practices at the highest possible standards to control emissions of highly reactive volatile organic compounds (HRVOC), which include 1,3-Butadiene, Butene, trans-2-Butene, cis-2-Butene, Ethylene, Propylene, Toluene, Xylene, m,p-Xylene, o-Xylene. (State Only).

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- 28 [LAC 33:III.501.C.6] Maintain, to the extent practicable, a leak-free facility taking such steps as are necessary and reasonable to prevent leaks and to expeditiously repair leaks that occur. Update the written plan presently required by LAC 33:III.2113.A.4 within 30 days of receipt of this permit to incorporate these general duty obligations into the housekeeping procedures. The plan shall then be considered a means of emission control subject to the required use and maintenance provisions of LAC 33:III.905. Failure to develop, use, and diligently maintain the plan shall be a violation of this permit. (State Only).
- 29 [LAC 33:III.5105.A.1] Do not construct or modify any stationary source subject to any standard set forth in LAC 33:III. Chapter 51. Subchapter A without first obtaining written authorization from DEQ in accordance with LAC 33:III. Chapter 51. Subchapter A, after the effective date of the standard.
- 30 [LAC 33:III.5105.A.2] Do not cause a violation of any ambient air standard listed in LAC 33:III. Table 51.2, unless operating in accordance with LAC 33:III.5109.B.
- 31 [LAC 33:III.5105.A.3] Do not build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission that would otherwise constitute a violation of an applicable standard.
- 32 [LAC 33:III.5105.A.4] Do not fail to keep records, notify, report or revise reports as required under LAC 33:III. Chapter 51. Subchapter A.
- 33 [LAC 33:III.5107.A.2] Include a certification statement with the annual emission report and revisions to any emission report that attests that the information contained in the emission report is true, accurate, and complete, and that is signed by a responsible official, as defined in LAC 33:III.502. Include the full name of the responsible official, title, signature, date of signature and phone number of the responsible official.
- 34 [LAC 33:III.5107.A] Submit Annual Emissions Report (TED): Due annually, by the 31st of March unless otherwise directed by DEQ, to the Office of Environmental Assessment in a format specified by DEQ. Identify the quantity of emissions in the previous calendar year for any toxic air pollutant listed in Table 51.1 or Table 51.3.
- 35 [LAC 33:III.5107.B.1] Submit notification: Due to the Department of Public Safety 24-hour Louisiana Emergency Hazardous Materials Hotline at (225) 925-6595 immediately, but in no case later than 1 hour, after any discharge of a toxic air pollutant into the atmosphere that results or threatens to result in an emergency condition (a condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water or air environment, or cause severe damage to property).
- 36 [LAC 33:III.5107.B.2] Submit notification: Due to SPOC, except as provided in LAC 33:III.5107.B.6, no later than 24 hours after the beginning of any unauthorized discharge into the atmosphere of a toxic air pollutant as a result of bypassing an emission control device, when the emission control bypass was not the result of an upset, and the quantity of the unauthorized bypass is greater than or equal to the lower of the Minimum Emission Rate (MER) in LAC 33:III.5112, Table 51.1, or a reportable quantity (RQ) in LAC 33:III.3931, or the quantity of the unauthorized bypass is greater than one pound and there is no MER or RQ for the substance in question. Submit notification in the manner provided in LAC 33:III.3923.
- 37 [LAC 33:III.5107.B.3] Submit notification: Due to SPOC, except as provided in LAC 33:III.5107.B.6, immediately, but in no case later than 24 hours after any unauthorized discharge of a toxic air pollutant into the atmosphere that does not cause an emergency condition, the rate or quantity of which is in excess of that allowed by permit, compliance schedule, or variance, or for upset events that exceed the reportable quantity in LAC 33:III.3931.
- 38 [LAC 33:III.5107.B.4] Submit written report: Due by certified mail to SPOC within seven calendar days of learning of any such discharge or equipment bypass as referred to in LAC 33:III.5107.B.1 through B.3. Include the information specified in LAC 33:III.5107.B.4.a.i through B.4.a.viii.
- 39 [LAC 33:III.5107.B.5] Report all discharges to the atmosphere of a toxic air pollutant from a safety relief device, a line or vessel rupture, a sudden equipment failure, or a bypass of an emission control device, regardless of quantity, IF THEY CAN BE MEASURED AND CAN BE RELIABLY QUANTIFIED USING GOOD ENGINEERING PRACTICES, to DEQ along with the annual emissions report and where otherwise specified. Include the identity of the source, the date and time of the discharge, and the approximate total loss during the discharge.

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**AI2049 BASF - Geismar Site**

40 [LAC 33:III.5109.C]

Develop a standard operating procedure (SOP) within 120 days after achieving or demonstrating compliance with the standards specified in LAC 33:III.Chapter 51. Detail in the SOP all operating procedures or parameters established to ensure that compliance with the applicable standards is maintained and address operating procedures for any monitoring system in place, specifying procedures to ensure compliance with LAC 33:III.5113.C.5. Make a written copy of the SOP available on site or at an alternate approved location for inspection by DEQ. Provide a copy of the SOP within 30 days upon request by DEQ.

Submit notification in writing: Due to SPOC not more than 60 days nor less than 30 days prior to initial start-up. Submit the anticipated date of the initial start-up.

Submit notification in writing: Due to SPOC within 10 working days after the actual date of initial start-up of the source. Submit the actual date of initial start-up of the source.

Conduct emission tests as set forth in accordance with Test Methods of 40 CFR, parts 60, 61, and 63 or in accordance with alternative test methods approved by DEQ.

An individual or company contracted to perform a demolition or renovation activity which disturbs RACM must be recognized by the Licensing Board for Contractors to perform asbestos abatement, and shall meet the requirements of LAC 33:III.5151.F.2 and F.3 for each demolition or renovation activity.

Activate the preplanned abatement strategy listed in LAC 33:III.5611.Table 5 when the administrative authority declares an Air Pollution Alert.

Activate the preplanned strategy listed in LAC 33:III.5611.Table 6 when the administrative authority declares an Air Pollution Warning.

Activate the preplanned abatement strategy listed in LAC 33:III.5611.Table 7 when the administrative authority declares an Air Pollution Emergency.

Prepare standby plans for the reduction of emissions during periods of Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency. Design standby plans to reduce or eliminate emissions in accordance with the objectives as set forth in LAC 33:III.5611.Tables 5, 6, and 7.

Comply with the provisions in 40 CFR 68, except as specified in LAC 33:III.5901.

Identify hazards that may result from accidental releases of the substances listed in 40 CFR 68.130, Table 59.0 of LAC 33:III.5907, or Table 59.1 of LAC 33:III.5913 using appropriate hazard assessment techniques, design and maintain a safe facility, and minimize the off-site consequences of accidental releases of such substances that do occur.

Submit registration: Due January 31, 1998, or within 60 days after the source becomes subject to LAC 33:III.Chapter 59, whichever is later. Include the information listed in LAC 33:III.5911.B, and submit to the Office of Environmental Compliance.

Submit amended registration: Due to the Office of Environmental Compliance within 60 days after the information in the submitted registration is no longer accurate.

Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 31st of March for the period January 1 to December 31 of the previous year unless otherwise directed. Submit emission inventory data in the format specified by the Office of Environmental Assessment. Include all data applicable to the emissions source(s), as specified in LAC 33:III.919.A.D.

**EQT0582 1-90 NVP Water Scrubber**

Prevent particulate matter from becoming airborne by taking all reasonable precautions. These precautions shall include, but not be limited to, those specified in LAC 33:III.1305.A.1-7.

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**EQT0582 1-90 NVP Water Scrubber**

- 55 [LAC 33:III.131.C] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.  
 Which Months: All Year Statistical Basis: Six-minute average
- 56 [LAC 33:III.501.C.6] Flow rate monitored by flow rate monitoring device once per 12 hour shift. (State-Only Requirement).
- 57 [LAC 33:III.501.C.6] Which Months: All Year Statistical Basis: None specified
- 58 [LAC 33:III.501.C.6] Flow rate recordkeeping by electronic or hard copy once per 12 hour shift. (State-Only Requirement).
- 59 [LAC 33:III.501.C.6] Scrubbing Agent (Water): Flow rate  $\geq$  20 gallons/hr. (State-Only Requirement).  
 Which Months: All Year Statistical Basis: None specified
- Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the scrubber operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division. (State-Only Requirement).

**EQT0587 2-90 PYR/NVP/PVP Plants - Flare**

- 60 [40 CFR 60.112(b)(a)(3)(ii)] VOC, Total  $\geq$  95 % reduction efficiency using a closed vent system and control device. Subpart Kb. [40 CFR 60.112b(a)(3)(ii)]  
 Which Months: All Year Statistical Basis: None specified
- 61 [40 CFR 60.18(e)(1)] Design and operate for no visible emissions, as determined by the methods specified in 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any two consecutive hours. Subpart A. [40 CFR 60.18(c)(1)]
- 62 [40 CFR 60.18(e)(2)] Operate with a flame present at all times, as determined by the methods specified in 40 CFR 60.18(f)(2). Subpart A. [40 CFR 60.18(c)(2)]
- 63 [40 CFR 60.18(e)(3)(ii)] Heat content  $\geq$  300 BTU/scf (11.2 MJ/sec). Determine the net heating value of the gas being combusted by the methods specified in 40 CFR 60.18(f)(3). Subpart A. [40 CFR 60.18(c)(3)(ii)]
- 64 [40 CFR 60.18(e)(4)(i)] Which Months: All Year Statistical Basis: None specified  
 Exit Velocity  $<$  60 ft/sec (18.3 m/sec), as determined by the method specified in 40 CFR 60.18(f)(4). Subpart A. [40 CFR 60.18(c)(4)(i)]
- 65 [40 CFR 60.18(d)] Which Months: All Year Statistical Basis: None specified  
 Monitor flares to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how to monitor flares. Subpart A. [40 CFR 60.18(d)]
- 66 [40 CFR 60.18(e)] Operate at all times when emissions may be vented to the flare. Subpart A. [40 CFR 60.18(e)]
- 67 [40 CFR 60.18(f)(2)] Presence of a flame monitored by flame monitor continuously. Use a thermocouple or any other equivalent device to detect the presence of a flare pilot flame. Subpart A. [40 CFR 60.18(f)(2)]
- 68 [40 CFR 63.2520] Which Months: All Year Statistical Basis: None specified  
 Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.
- 69 [40 CFR 63.2525] Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

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**EQT0587 2-90 PYR/NVP/PVVP Plants - Flare**

70 [40 CFR 63.2535(c)]

After the compliance dates specified in 40 CFR 63.2445 of Subpart FFFF, the Permittee is in compliance with the provisions of 40 CFR 63 Subpart FFFF for any storage tank that is assigned to an MCPU and that has a fixed roof, closed-vent system, and control device in compliance with the provisions of 40 CFR 60 Subpart Kb, except that the Permittee must comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 63 Subpart FFFF. For any equipment, emission stream, or wastewater stream subject to the provisions of both 40 CFR 63 Subpart FFFF and another rule, the Permittee also must identify the subject equipment, emission stream, or wastewater stream, and the provisions with which the Permittee will comply, in the notification of compliance status report required by 40 CFR 63.2520(d). Subpart FFFF.

71 [LAC 33:III.1.105]

Opacity <= 20 percent, except for a combined total of six hours in any 10 consecutive day period, for burning in connection with pressure valve releases for control over process upsets.

72 [LAC 33:III.1.105]

Which Months: All Year Statistical Basis: None specified  
 Submit notification: Due to SPOC as soon as possible after the start of burning of pressure valve releases for control over process upsets. Notify in accordance with LAC 33:1.3923. Notification is required only if the upset cannot be controlled in six hours.

73 [LAC 33:III.5109.A.1]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Compliance with the performance requirements of 40 CFR 60.18 of Subpart A, as referenced in 40 CFR 63.2535(c) of Subpart FFFF, is determined as MACT.

**EQT0588 2-90(c) TK-291 By-product Alcohol Tank**

74 [40 CFR 60.112b(a)(3)(ii)]

VOC, Total >= 95 % reduction efficiency using a closed vent system and control device. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (40 CFR 60.18) of the General Provisions/Subpart Kb. [40 CFR 60.112b(a)(3)(ii)]

75 [40 CFR 60.112b(a)(3)]

Which Months: All Year Statistical Basis: None specified  
 Equip with a closed vent system and control device. Design the closed vent system to collect all VOC vapors and gases discharged from the storage vessel and operate with no detectable emissions. Subpart Kb [40 CFR 60.112b(a)(3)]

76 [40 CFR 60.116(b)]

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Keep copies of all records for the life of the source as specified by 40 CFR 60.116(b)(a). Subpart Kb. [40 CFR 60.116(b)]

77 [LAC 33:III.2103.A]

Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

78 [LAC 33:III.2103.E.1]

VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.

79 [LAC 33:III.2103.H.3]

Which Months: All Year Statistical Basis: None specified  
 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e.  
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.

**SPECIFIC REQUIREMENTS**

**AID: 2049 - BASF Corp - Geismar Site**  
**Activity Number: PER20060028**  
**Permit Number: 2039-V1**  
**Air - Title V Regular Permit Renewal**

**EQT0588 2-90(c) TK-291 By-product Alcohol Tank**

81 [LAC 33.III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. This source does not emit any air toxics for which facility-wide emissions exceed the MER. Compliance with NSPS 40 CFR 60 Subpart Kb is determined as MACT.

**EQT0589 2-90(d) TK-292 NVP Residue Tank**

82 [40 CFR 60.112b(a)(3)(ii)]

VOC, Total >= 95 % reduction efficiency using a closed vent system and control device. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (40 CFR 60.18) of the General ProvisionsSubpart Kb. [40 CFR 60.112b(a)(3)(ii)]

83 [40 CFR 60.112b(a)(3)]

Which Months: All Year Statistical Basis: None specified  
 Equip with a closed vent system and control device. Design the closed vent system to collect all VOC vapors and gases discharged from the storage vessel and operate with no detectable emissions. Subpart Kb. [40 CFR 60.112b(a)(3)]

84 [40 CFR 60.112b(b)(1)]

Equip with a closed vent system and control device as specified in 40 CFR 60.112b(a)(3). Subpart Kb. [40 CFR 60.112b(b)(1)]  
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Keep copies of all records for the life of the source as specified by 40 CFR 60.116b(a). Subpart Kb. [40 CFR 60.116b(b)]

86 [LAC 33.III.2103.A]

Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

87 [LAC 33.III.2103.E.1]

VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.

88 [LAC 33.III.2103.H.3]

Which Months: All Year Statistical Basis: None specified  
 Determine VOC maximum true vapor pressure using the methods in LAC 33.III.2103.H.3. a-e.

89 [LAC 33.III.2103.I]

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33.III.2103.I.1.1 - 7, as applicable.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**EQT0590 2-90(e) TK-392A Multi-purpose Tank**

91 [40 CFR 63.2470]

Permittee shall comply with all applicable provisions of 40 CFR 63.2470. Subpart FFFF.

92 [40 CFR 63.2520]

Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

93 [40 CFR 63.2525]

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

94 [LAC 33.III.2103.A]

Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

**SPECIFIC REQUIREMENTS**

AI ID: 2049 - BASF Corp - Geismar Site  
 Activity Number: PER20060028  
 Permit Number: 2039-V1  
 Air - Title V Regular Permit Renewal

**EQT0590 2-90(e) TK-392A Multi-purpose Tank**

95 [LAC 33:III.2103.E.1]

VOC, Total  $\geq$  95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.

Which Months: All Year Statistical Basis: None specified

Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e.

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

Emiss Class III TAPs only. MACT is not required.

**EQT0591 2-90(f) TK-392B Multi-purpose Tank**

99 [40 CFR 63.2470]

Permittee shall comply with all applicable provisions of 40 CFR 63.2470. Subpart FFFF.

Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

VOC, Total  $\geq$  95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.

Which Months: All Year Statistical Basis: None specified

Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e.

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

Emiss Class III TAPs only. MACT is not required.

**EQT0592 2-90(g) TK-590 Isopropyl Alcohol Tank**

107 [LAC 33:III.2103.A]

Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

VOC, Total  $\geq$  95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.

Which Months: All Year Statistical Basis: None specified

Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e.

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.

**SPECIFIC REQUIREMENTS**

AI ID: 2049 - BASF Corp • Geismar Site  
 Activity Number: PER20060028  
 Permit Number: 2039-V1  
 Air - Title V Regular Permit Renewal

**EQT0592 2-90(g) TK-590 Isopropyl Alcohol Tank**

111 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
 This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**EQT0593 2-90(h) TK-591 Multi-purpose Tank**

112 [40 CFR 60.112b(a)(3)(ii)]

VOC, Total >= 95 % reduction efficiency using a closed vent system and control device. Subpart Kb. [40 CFR 60.112b(a)(3)(ii)]  
 Which Months: All Year Statistical Basis: None specified

113 [40 CFR 60.112b(a)(3)]

Equip with a closed vent system and control device. Design the closed vent system to collect all VOC vapors and gases discharged from the storage vessel and operate with no detectable emissions. Subpart Kb. [40 CFR 60.112b(a)(3)]  
 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Keep copies of all records for the life of the source as specified by 40 CFR 60.116b(a). Subpart Kb. [40 CFR 60.116b(b)]

114 [40 CFR 60.116b(b)]

Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare. Subpart FFFF. [40 CFR 63.2470(Table 4)]  
 Permittee shall comply with all applicable provisions of 40 CFR 63.2470. Subpart FFFF.

115 [40 CFR 63.2470(Table 4)]

Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

116 [40 CFR 63.2470]

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

117 [40 CFR 63.2520]

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.  
 Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

118 [40 CFR 63.2525]

VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.

119 [LAC 33:III.2103.A]

Which Months: All Year Statistical Basis: None specified  
 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e.  
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.

120 [LAC 33:III.2103.E.1]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
 Emits Class III TAPs only. MACT is not required.

**EQT0594 2-90(i) TK-592 Vinyl Acetate Tank**

124 [40 CFR 60.112b(a)(3)(ii)]

VOC, Total >= 95 % reduction efficiency using a closed vent system and control device. Subpart Kb. [40 CFR 60.112b(a)(3)(ii)]  
 Which Months: All Year Statistical Basis: None specified

125 [40 CFR 60.112b(a)(3)]

Equip with a closed vent system and control device. Design the closed vent system to collect all VOC vapors and gases discharged from the storage vessel and operate with no detectable emissions. Subpart Kb. [40 CFR 60.112b(a)(3)]  
 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Keep copies of all records for the life of the source as specified by 40 CFR 60.116b(a). Subpart Kb. [40 CFR 60.116b(b)]

**SPECIFIC REQUIREMENTS**

AI ID: 2049 - BASF Corp - Geismar Site  
 Activity Number: PER20060028  
 Permit Number: 2039-V1  
 Air - Title V Regular Permit Renewal

**EQT0594 2-90(i) TK-592 Vinyl Acetate Tank**

127 [40 CFR 63.2470(Table 4)]

128 [40 CFR 63.2470]

129 [40 CFR 63.2220]

130 [40 CFR 63.2525]

131 [LAC 33:III.2103.A]

132 [LAC 33:III.2103.E.1]

133 [LAC 33:III.2103.H.3]

134 [LAC 33:III.2103.I]

135 [LAC 33:III.5109.A]

Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare. Subpart FFFF. [40 CFR 63.2470(Table 4)]

Permittee shall comply with all applicable provisions of 40 CFR 63.2470. Subpart FFFF.

Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

VOC, Total  $\geq 95\%$  control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year.

Which Months: All Year Statistical Basis: None specified

Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e.

Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-e. Equipment/operational data recordkeeping by electronic or hard copy at the regulations specified frequency. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable.

Control emissions of toxic air pollutants to degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Emits Class III TAPs only. MACT is not required.

**EQT0595 2-90(j) TK-596 25% Aqueous Ammonia Tank**

136 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Emits Class III TAPs only. MACT is not required.

**EQT0596 2-90(k) NVP/PVP Process Separation Vents**

137 [LAC 33:III.2115.B]

Nonhalogenated hydrocarbon burning: Temperature  $\geq 1600$  F (870 degrees C) for 0.5 seconds or greater in a direct-flame afterburner or thermal incinerator. Other devices will be accepted provided 98 percent or greater VOC destruction or removal efficiency can be demonstrated, as determined in accordance with LAC 33:III.2115.J.1, or if emissions are reduced to 20 ppm by volume, whichever is less stringent.

Which Months: All Year Statistical Basis: None specified

Determine compliance with LAC 33:III.2115.A through G by applying the test methods specified in LAC 33:III.2115.1.1 through 5, as appropriate.

Demonstrate compliance with LAC 33:III.2115 as requested by DEQ.

Install and maintain monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with design specifications. Monitor and record at a minimum the parameters listed in LAC 33:III.2115.J.2.a through e.

Comply with LAC 33:III.2115 as soon as practicable but in no event later than August 20, 2003. Comply with the requirements of LAC 33:III.2115 as soon as practicable, but in no event later than one year from the promulgation of the regulation revision, if subject to LAC 33:III.2115 as a result of a revision of LAC 33:III.2115.

**SPECIFIC REQUIREMENTS**

AI ID: 2049 - BASF Corp - Geismar Site  
 Activity Number: PER20060028  
 Permit Number: 2039-V1  
 Air - Title V Regular Permit Renewal

**EQT0596 2-90(k) NVP/PVP Process Separation Vents**

142 [LAC 33:III.2115.K]

Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain the records specified in LAC 33:III.2115.K.1 through K.3. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. This source does not emit any air toxics for which facility-wide emissions exceed the MER. Compliance with all applicable requirements of LAC 33:III.2115 is determined as MACT.

**EQT0597 4-90 TK-190 Pyrrolidone Storage Tank**

144 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**EQT0598 5-90 PVP Spray Dryer Scrubber**

145 [40 CFR 63.2460]

Permittee shall comply with all applicable provisions of 40 CFR 63.2460. Subpart FFFF.

Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

Flow rate monitored by flow rate monitoring device once per 1/2 hour shift. (State-Only Requirement).

Which Months: All Year Statistical Basis: None specified

Flow rate recordkeeping by electronic or hard copy once per 1/2 hour shift. (State-Only Requirement).

Scrubbing Agent (Water): Flow rate >= 15000 kg/hr. (State-Only Requirement).

Which Months: All Year Statistical Basis: None specified

Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the scrubber operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division. (State-Only Requirement).

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Control acetaldehyde (Group II TAP) emissions to less than 50 ppmv. No additional controls are required.

**EQT0599 6-90 PVP-I Scrubber**

154 [40 CFR 63.2460]

Permittee shall comply with all applicable provisions of 40 CFR 63.2460. Subpart FFFF.

Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

**SPECIFIC REQUIREMENTS****AI ID: 2049 - BASF Corp - Geismar Site****Activity Number: PER2006002B****Permit Number: 2039-V1****Air - Title V Regular Permit Renewal****EQT0599 6-90 PVP-J Scrubber**

- 158 [LAC 33:III.501.C.6] Flow rate monitored by flow rate monitoring device once per 12 hour shift. (State-Only Requirement).  
Which Months: All Year Statistical Basis: None specified
- 159 [LAC 33:III.501.C.6] Flow rate recordkeeping by electronic or hard copy once per 12 hour shift. (State-Only Requirement).
- 160 [LAC 33:III.501.C.6] Scrubbing Agent (water): Flow rate  $\geq 25000$  kg/hr. (State-Only Requirement).
- 161 [LAC 33:III.501.C.6] Which Months: All Year Statistical Basis: None specified  
Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the scrubber operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division. (State-Only Requirement).
- 162 [LAC 33:III.5109.A.1] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Emiss Class III TAPs only. MACT is not required.

**EQT0600 6-90(a) D-507A Intermediate Product Storage Tank**

- 163 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**EQT0601 6-90(b) D-507B Intermediate Product Storage Tank**

- 164 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**EQT0602 6-90(c) D-517A Intermediate Product Storage Tank**

- 165 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**EQT0603 6-90(d) D-517B Intermediate Product Storage Tank**

- 166 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**EQT0604 6-90(e) D-527A Intermediate Product Storage Tank**

- 167 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**EQT0606 6-90(g) D-501/511 Monomer Feed Drums**

- 168 [LAC 33:III.5109.A] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**SPECIFIC REQUIREMENTS**

AI ID: 2049 - BASF Corp - Geismar Site  
 Activity Number: PER20060028  
 Permit Number: 2039.V1  
 Air - Title V Regular Permit Renewal

**EQT0607 6-90(h) D-505/515 PVP Initiator Feed Drums**

169 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
 This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**EQT0608 6-90(l) D-516 Formic Acid Storage Drum**

170 [LAC 33:III.5109.A]

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
 This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**EQT0609 6-90(k) D-509 Triethylamine Storage Tank**

171 [40 CFR 63.2470]

Permittee shall comply with all applicable provisions of 40 CFR 63.2470. Subpart FFFF.

172 [40 CFR 63.2520]

Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

173 [40 CFR 63.2525]

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

**EQT0610 6-90(l) Z-559 Liquid PVP Drum Loading System**

174 [40 CFR 63.2475]

Permittee shall comply with all applicable provisions of 40 CFR 63.2475. Subpart FFFF.

175 [40 CFR 63.2520]

Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

176 [40 CFR 63.2525]

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
 This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**EQT0611 6-90(m) PVP/PVP-I Transfer and Loading Operations**

178 [40 CFR 63.2475]

Permittee shall comply with all applicable provisions of 40 CFR 63.2475. Subpart FFFF.

179 [40 CFR 63.2520]

Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

180 [40 CFR 63.2525]

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.  
 Which Months: All Year Statistical Basis: Six-minute average

**EQT0612 6-90(n) PVP/PVP-I Transfer and Loading Operations**

182 [40 CFR 63.2475]

Permittee shall comply with all applicable provisions of 40 CFR 63.2475. Subpart FFFF.

183 [40 CFR 63.2520]

Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

184 [40 CFR 63.2525]

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

**SPECIFIC REQUIREMENTS**

AI ID: 2049 - BASF Corp - Geismar Site  
 Activity Number: PER20060028  
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**EQT0612 6-90(n) PVP/PVP-I Transfer and Loading Operations**

185 [LAC 33:III.1311.C] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

**EQT0613 6-90(o) PVP/PVP-I Transfer and Loading Operations**

186 [40 CFR 63.2475] Permittee shall comply with all applicable provisions of 40 CFR 63.2475. Subpart FFFF.

187 [40 CFR 63.2520] Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

188 [40 CFR 63.2525] Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

189 [LAC 33:III.1311.C] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

**EQT0614 6-90(p) PVP/PVP-I Transfer and Loading Operations**

190 [40 CFR 63.2475] Permittee shall comply with all applicable provisions of 40 CFR 63.2475. Subpart FFFF.

191 [40 CFR 63.2520] Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

192 [40 CFR 63.2525] Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

193 [LAC 33:III.1311.C] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

**EQT0615 6-90(q) PVP/PVP-I Transfer and Loading Operations**

194 [40 CFR 63.2475] Permittee shall comply with all applicable provisions of 40 CFR 63.2475. Subpart FFFF.

195 [40 CFR 63.2520] Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

196 [40 CFR 63.2525] Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

197 [LAC 33:III.1311.C] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

**EQT0616 6-90(r) PVP/PVP-I Transfer and Loading Operations**

198 [40 CFR 63.2475] Permittee shall comply with all applicable provisions of 40 CFR 63.2475. Subpart FFFF.

199 [40 CFR 63.2520] Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

200 [40 CFR 63.2525] Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

**SPECIFIC REQUIREMENTS**

AI ID: 2049 - BASF Corp - Gesmar Site  
 Activity Number: PER20060028  
 Permit Number: 2039-V1  
 Air - Title V Regular Permit Renewal

**EQT0616 6-90(r) PVP/PVP-I Transfer and Loading Operations**

201 [LAC 33:III.1311.C]

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

**EQT0617 6-90(s) PVP/PVP-I Transfer and Loading Operations**

202 [40 CFR 63.2475]

203 [40 CFR 63.2520]

204 [40 CFR 63.2525]

205 [LAC 33:III.1311.C]

Permittee shall comply with all applicable provisions of 40 CFR 63.2475. Subpart FFFF.

Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

**EQT0618 6-90(t) PVP/PVP-I Transfer and Loading Operations**

206 [40 CFR 63.2475]

207 [40 CFR 63.2520]

208 [40 CFR 63.2525]

209 [LAC 33:III.1311.C]

Permittee shall comply with all applicable provisions of 40 CFR 63.2475. Subpart FFFF.

Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

**EQT0619 6-90(u) PVP/PVP-I Transfer and Loading Operations**

210 [40 CFR 63.2475]

211 [40 CFR 63.2520]

212 [40 CFR 63.2525]

213 [LAC 33:III.1311.C]

Permittee shall comply with all applicable provisions of 40 CFR 63.2475. Subpart FFFF.

Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

**EQT0620 8-90 PYR/PVP Plants - Truck Loading Rack**

214 [40 CFR 63.2475]

215 [40 CFR 63.2520]

216 [40 CFR 63.2525]

Permittee shall comply with all applicable provisions of 40 CFR 63.2475. Subpart FFFF.

Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.

Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

**SPECIFIC REQUIREMENTS**

AI ID: 2049 - BASF Corp - Geismar Site  
 Activity Number: PER20060028  
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**EQT0620 8-90 PYR/PVP Plants - Truck Loading Rack**

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
 This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**EQT0621 21-90 TK-293A Vinylpyrrolidone Storage Tank**

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
 This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**EQT0622 22-90 TK-293B Vinylpyrrolidone Storage Tank**

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
 This source does not emit any air toxics for which facility-wide emissions exceed the MER. No further control is required.

**EQT0623 23-90 TK-2B5 Wastewater Tank**

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
 Emits Class III TAPs only. MACT is not required.

**EQT0625 25-90 PYR/NVP/PVP/PVP-I Plants - Cooling Tower**

Heat exchange systems: Maintain, at all times, the monitoring plan currently in use. Maintain onsite, or accessible from a central location by computer or other means that provide access within 2 hours after a request. If a monitoring plan is superseded, retain the most recent superseded plan at least until 5 years from the date of its creation. Retain the superseded plan on-site (or accessible from a central location by computer or other means that provides access within 2 hours after a request) for at least 6 months after its creation. Subpart F. [40 CFR 63.104(c)(3)]  
 Heat exchange systems: Prepare and implement a monitoring plan that documents the procedures that will be used to detect leaks of process fluids into cooling water. Require monitoring of one or more surrogate indicators or monitoring of one or more process parameters or other conditions that indicate a leak. Include the information specified in 40 CFR 63.104(c)(1)(i) and (ii). Monitor no less frequently than monthly for the first six months and quarterly thereafter to detect leaks. If a substantial leak is identified by methods other than those described in the monitoring plan and method(s) specified in the plan could not detect the leak, revise the plan and document the basis for the changes. Complete revisions to the plan no later than 180 days after discovery of the leak. Subpart F. [40 CFR 63.104(c)]  
 Heat exchange systems: Repair leaks as soon as practicable but not later than 45 calendar days after receiving results of monitoring tests indicating a leak, if a leak is detected according to the criteria of 40 CFR 63.104(b) or (c). Once the leak has been repaired, confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later. Subpart F. [40 CFR 63.104(d)]  
 Heat exchange systems: Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Retain the records identified in 40 CFR 63.104(f)(1) through (iv) as specified in 40 CFR 63.103(c)(1). Subpart F. [40 CFR 63.104(f)]  
 Permittee shall comply with all applicable requirements of 40 CFR 63.104 of Subpart F and the requirements referenced therein, except as specified in 40 CFR 63.2490. Subpart FFFF. [40 CFR 63.2490(Table 10)]

**SPECIFIC REQUIREMENTS**

AI ID: 2049 - BASF Corp - Geismar Site  
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**EQT0625 25-90 PYR/NVP/PVP/PVP-I Plants - Cooling Tower**

226 [LAC 33:III.1311.C] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

Which Months: All Year Statistical Basis: Six-minute average

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
 Emiss Class III TAPs only. MACT is not required.

**EQT0626 PYR/NVP/PVP/PVP-I Wastewater Streams**

228 [40 CFR 63.132(a)(3)] For wastewater streams that are Group 2 for table 9 compounds, permittee shall comply with the applicable recordkeeping and reporting requirements specified in 40 CFR 63.146(b)(1) and 40 CFR 63.147(b)(8). Subpart G. [40 CFR 63.132(a)(3)]  
 Permittee shall comply with all applicable requirements in 40 CFR 63.132 through 40 CFR 63.148 of Subpart G and the requirements referenced therein, except as specified in 40 CFR 63.2485. Subpart FFFF. [40 CFR 63.2485(Table 7.1)]  
 Permittee shall comply with all applicable provisions of 40 CFR 63.2485. Subpart FFFF.  
 Permittee shall comply with all applicable reporting requirements of 40 CFR 63.2520. Subpart FFFF.  
 Permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63.2525. Subpart FFFF.

**EQT0628 24-90 TK-390 Multi-purpose Tank**

233 [LAC 33:III.5109.A.1] Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.  
 Emiss Class III TAPs only. MACT is not required.

**FUG0024 9-90 PYR/NVP/PVP/PVP-I Plants - Fugitive Emissions**

234 [40 CFR 63.160] The requirements of 40 CFR 63 Subpart G (40 CFR 63.162 through 182) and 40 CFR 63 Subpart FFFF (40 CFR 63.2480) apply only to components in OHAP service (> 5% by weight total organic HAPS) in the PVP Plant. The PVP Plant is the only plant in this permit that is subject to 40 CFR 63 Subpart FFFF and therefore 40 CFR 63 Subpart H. [40 CFR 63.160, 40 CFR 63.2480]  
 Identify each piece of equipment in a process unit such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H. Subpart H. [40 CFR 63.162(c)]  
 Clearly identify leaking equipment, for leaking equipment detected as specified in 40 CFR 63.163, 40 CFR 63.164, 40 CFR 63.168, 40 CFR 63.169, and 40 CFR 63.172 through 63.174. The identification may be removed after the equipment is repaired, except for valves or for connectors subject to 40 CFR 63.174(c)(1)(i). The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(1)(D), and no leak has been detected during the follow-up monitoring. If electing to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored as specified in 40 CFR 63.174(c)(1)(i) and no leak is detected during that monitoring. Subpart H. [40 CFR 63.162(f)]

**SPECIFIC REQUIREMENTS****AI ID: 2049 - BASF Corp - Geismar Site****Activity Number: PER20060028****Permit Number: 2039-V1****Air - Title V Regular Permit Renewal****FUG0024 9-90 PYR/NVP/PVP/PVP-I Plants - Fugitive Emissions**

- 237 [40 CFR 63.163(b)(1)] Pumps in light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, except as provided in 40 CFR 63.162(b) and 63.163(e) through (j). If a reading of 10,000 ppm (phase I); 5,000 ppm (phase II); or 5,000 ppm (phase III, pumps handling polymerizing monomers), 2,000 ppm (phase III, pumps in food/medical service), or 1,000 ppm (phase III, all other pumps) or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(1)]
- 238 [40 CFR 63.163(b)(3)] Which Months: All Year Statistical Basis: None specified  
Pumps in light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. If a leak is detected, initiate the repair provisions specified in 40 CFR 63.163(c). Subpart H. [40 CFR 63.163(b)(3)]
- 239 [40 CFR 63.163(c)] Which Months: All Year Statistical Basis: None specified  
Pumps in light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.163(c)(3) and 40 CFR 63.171. Subpart H. [40 CFR 63.163(c)]
- 240 [40 CFR 63.163(d)(2)] Pumps in light liquid service: Implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.176, if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak. Subpart H. [40 CFR 63.163(d)(2)]
- 241 [40 CFR 63.163(d)(4)] Pumps in light liquid service: Determine percent leaking pumps using the equation in 40 CFR 63.163(d)(4). Subpart H. [40 CFR 63.163(d)(4)]
- 242 [40 CFR 63.163(e)(1)] Pumps in light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-loop system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(1)]
- 243 [40 CFR 63.163(e)(2)] Pumps in light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(2)]
- 244 [40 CFR 63.163(e)(3)] Pumps in light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(3)]
- 245 [40 CFR 63.163(e)(4)] Pumps in light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, monitor the pump as specified in 40 CFR 63.180(b) to determine if there is a leak of organic HAP in the barrier fluid. If an instrument reading of 1,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(4)]
- 246 [40 CFR 63.163(e)(6)(i)] Which Months: All Year Statistical Basis: None specified  
Pumps in light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)(i)]
- 247 [40 CFR 63.163(e)(6)] Pumps in light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (g). Subpart H. [40 CFR 63.163(e)(6)]

**SPECIFIC REQUIREMENTS**

**AI ID: 2049 - BASF Corp - Geismar Site**  
**Activity Number: PER20060028**  
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**FUG0024 9-90 PYR/NVP/PVP/PVP-I Plants - Fugitive Emissions**

- 248 [40 CFR 63.163(e)] Pumps in light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the pump is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.163(e)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)]
- Which Months: All Year Statistical Basis: None specified
- Pumps in light liquid service (unsafe-to-monitor): Determine that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.163(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(1)]
- 249 [40 CFR 63.163(j)(1)] Pumps in light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- Compressors: Equip with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 40 CFR 63.162(b) and 40 CFR 63.164(h) and (i). Subpart H. [40 CFR 63.164(a)]
- Compressors: Operate the seal system with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or equip with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid directly into a process stream. Subpart H. [40 CFR 63.164(b)]
- Compressors: Ensure that the barrier fluid is not in light liquid service. Subpart H. [40 CFR 63.164(c)]
- Compressors: Equip each barrier fluid system as described in 40 CFR 63.164(a) through (c) with a sensor that will detect failure of the seal system, barrier fluid system, or both. Subpart H. [40 CFR 63.164(d)]
- Compressors (sensor): Determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. Subpart H. [40 CFR 63.164(e)(2)]
- Compressors: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.164(g)]
- 250 [40 CFR 63.163(j)(2)] Compressors (no detectable emissions): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially and annually, and at other times requested by DEQ. Comply with this requirement instead of the requirements in 40 CFR 63.164(a) through (h). Subpart H. [40 CFR 63.164(i)(2)]
- Which Months: All Year Statistical Basis: None specified
- Compressors (sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an alarm, unless the compressor is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under 40 CFR 63.164(e)(2), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.164(g). Subpart H.
- 251 [40 CFR 63.164(a)] Which Months: All Year Statistical Basis: None specified
- 252 [40 CFR 63.164(b)]
- 253 [40 CFR 63.164(c)]
- 254 [40 CFR 63.164(d)]
- 255 [40 CFR 63.164(e)(2)]
- 256 [40 CFR 63.164(g)]
- 257 [40 CFR 63.164(i)(2)]
- 258 [40 CFR 63.164]

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**FUG0024 9-90 PYR/NVP/PVP/PVP-I Plants - Fugitive Emissions**

- Pressure relief device in gas/vapor service: Organic HAP < 500 ppm above background except during pressure releases, as determined by the method specified in 63.180(c). Subpart H. [40 CFR 63.165(a)]  
 Which Months: All Year Statistical Basis: None specified
- Pressure relief devices in gas/vapor service: After each pressure release, return to a condition indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.165(b)(1)]
- Pressure relief devices in gas/vapor service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after the pressure release and being returned to organic HAP service, to confirm the condition indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 63.180(c). Subpart H. [40 CFR 63.165(b)(2)]
- Pressure relief devices in gas/vapor service (rupture disk): After each pressure release, install a new rupture disk upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.165(a) and (b). Subpart H. [40 CFR 63.165(d)(2)]
- Sampling connection systems: Equip with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.162(b). Operate the system as specified in 40 CFR 63.166(b). Subpart H.
- Open-ended valves or lines: Equip with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.162(b) and 40 CFR 63.167(d) and (e). Ensure that the cap, blind flange, plug or second valve seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. Operate each open-ended valve or line equipped with a second valve in a manner such that the valve on the process fluid end is closed before the second valve is closed. Subpart H.
- Valves in gas/vapor service or light liquid service (Phase I): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- Which Months: All Year Statistical Basis: None specified  
 Valves in gas/vapor service or light liquid service (Phase II): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- Which Months: All Year Statistical Basis: None specified  
 Valves in gas/vapor service or light liquid service (Phase III, 2 percent or greater leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly, as specified in 40 CFR 63.180(b); or implement a quality improvement program for valves that complies with the requirements of 40 CFR 63.175 and monitor quarterly. If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). If electing to implement a quality improvement program, follow the procedures in 40 CFR 63.175. Subpart H. [40 CFR 63.168(d)(1)]
- Which Months: All Year Statistical Basis: None specified  
 Valves in gas/vapor service or light liquid service (Phase III, less than 2 percent leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Permittee may elect to comply with the alternate standards in 40 CFR 63.168(d)(3) and (d)(4). Subpart H. [40 CFR 63.168(d)(2)]
- Which Months: All Year Statistical Basis: None specified

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**FUG0024 9-90 PYR/NVP/PVP/PVP-I Plants - Fugitive Emissions**

- 269 [40 CFR 63.168(e)(1)] Valves in gas/vapor service or light liquid service: Determine percent leaking valves using the equation in 40 CFR 63.168(e)(1). Subpart H. [40 CFR 63.168(e)(1)]
- 270 [40 CFR 63.168(h)(3)] Valves in gas/vapor service or light liquid service (after leak repair): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within three months (at least) after repair to determine whether the valve has resumed leaking. Subpart H. [40 CFR 63.168(h)(3)]
- 271 [40 CFR 63.168(f)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.168(f)]
- 272 [40 CFR 63.168(h)(1)] Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.168(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(1)]
- 273 [40 CFR 63.168(i)(2)] Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the valves as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(2)]
- 274 [40 CFR 63.168(i)(1)] Which Months: All Year Statistical Basis: None specified Valves in gas/vapor service or light liquid service (difficult-to-monitor): Demonstrate that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(1)]
- 275 [40 CFR 63.168(i)(3)] Valves in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the valves at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(3)]
- 276 [40 CFR 63.169(a)] Which Months: All Year Statistical Basis: None specified Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) if evidence of a potential leak to the atmosphere is found by visible, audible, olfactory, or any other detection method. If a reading of 10,000 ppm for agitators, 5,000 ppm for pumps handling polymerizing monomers, 2,000 ppm for all other pumps (including pumps in food/medical service), or 500 ppm for valves, connectors, instrumentation systems, and pressure relief devices, or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.169(c). Subpart H. [40 CFR 63.169(a)]
- 277 [40 CFR 63.169(c)] Which Months: All Year Statistical Basis: None specified Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.169(c)]
- 278 [40 CFR 63.170] Surge control vessels and bottoms receivers: Equip with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements of 40 CFR 63.172, except as provided in 40 CFR 63.162(b), or comply with the requirements of 40 CFR 63.119(b) or (c), if surge control vessel or bottoms receiver is not routed back to the process and meets the conditions specified in 40 CFR 63 Subpart H Table 2 or Table 3. Subpart H.

**SPECIFIC REQUIREMENTS**

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**Air - Title V Regular Permit Renewal**

**FUG0024 9-90 PYR/NVP/PVP/PVP-I Plants - Fugitive Emissions**

- Closed-vent system (hard-piping): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(1)(i)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (hard-piping): Presence of a leak monitored by visual, audible, and/or olfactory annually. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(1)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(2)(i)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(2)(ii)]
- Which Months: All Year Statistical Basis: None specified
- Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.172(i). Subpart H. [40 CFR 63.172(h)]
- Closed-vent system (bypass lines): Flow monitored by flow indicator once every 15 minutes. Install flow indicator at the entrance to any bypass line. Subpart H. [40 CFR 63.172(f)(1)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (bypass lines): Flow recordkeeping by electronic or hard copy once every 15 minutes. Generate records as specified in 40 CFR 63.118(a)(3). Subpart H. [40 CFR 63.172(f)(1)]
- Closed-vent system (bypass lines): Seal or closure mechanism monitored by visual inspection/determination monthly to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart H. [40 CFR 63.172(f)(2)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (bypass lines): Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart H. [40 CFR 63.172(f)(2)]
- Closed-vent system (unsafe-to-inspect): Demonstrate that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential dangers as a consequence of complying with 40 CFR 63.172(f)(1) or (f)(2). Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(1)]
- Closed-vent system (unsafe-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(2)]
- Which Months: All Year Statistical Basis: None specified
- Closed-vent system (difficult-to-inspect): Demonstrate that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(l)(1)]

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- 291 [40 CFR 63.172(l)(2)] Closed-vent system (difficult-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every five years. Maintain a written plan that requires inspection of the equipment at least once every five years. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(l)(2)]  
 Which Months: All Year Statistical Basis: None specified  
 Ensure that the closed-vent system or control device is operating whenever organic HAP emissions are vented to the closed-vent system or control device. Subpart H. [40 CFR 63.172(m)]
- 292 [40 CFR 63.172(m)] Agitators in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(a)]  
 Which Months: All Year Statistical Basis: None specified  
 Agitators in gas/vapor service or light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator. If there are indications of liquids dripping from the agitator, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(b)]
- 293 [40 CFR 63.173(a)] Agitators in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.173(c)]  
 Which Months: All Year Statistical Basis: None specified  
 Agitators in gas/vapor service or light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure, or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(1)]  
 Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid organic HAP service. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(2)]  
 Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(3)]  
 Agitators in gas/vapor service or light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the agitator seal. If there are indications of liquid dripping from the agitator seal at the time of the weekly inspection, monitor the agitator as specified in 40 CFR 63.180(b) to determine the presence of organic HAP in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(4)]  
 Which Months: All Year Statistical Basis: None specified  
 Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)(i)]
- 294 [40 CFR 63.173(b)]  
 295 [40 CFR 63.173(c)]  
 296 [40 CFR 63.173(d)(1)]  
 297 [40 CFR 63.173(d)(2)]  
 298 [40 CFR 63.173(d)(3)]  
 299 [40 CFR 63.173(d)(4)]  
 300 [40 CFR 63.173(d)(6)(i)]

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- 301 [40 CFR 63.173(d)(6)] Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)]
- 302 [40 CFR 63.173(d)] Agitators in gas/vapor service or light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the agitator is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.173(d)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulations specified frequency. Monitor each agitator as often as practicable and at least monthly. Comply with this requirement instead of the weekly visual inspection requirement of 40 CFR 63.173(b)(1) and (d)(4), and the daily requirements of 40 CFR 63.173(d)(5). Subpart H [40 CFR 63.173(g)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service (difficult-to-monitor): Demonstrate that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.173(h)(1)]
- Agitators in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the agitator at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(3)]
- Which Months: All Year Statistical Basis: None specified
- Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.173(a) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(1)]
- Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the agitator as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within 12 months after the compliance date, except as provided in 40 CFR 63.174(f) through (h). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(b)(1)]
- Which Months: All Year Statistical Basis: None specified
- Connectors in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within the first 12 months after initial startup or by no later than 12 months after the date of promulgation of a specific subpart that references 40 CFR 63 Subpart H, whichever is later, except as specified in 40 CFR 63.174(f) through (h). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(b)(2)]
- Which Months: All Year Statistical Basis: None specified

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310	[40 CFR 63.174(b)(3)(i)]	Connectors in gas/vapor service or light liquid service (0.5% or greater leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Subpart H. [40 CFR 63.174(b)(3)(i)]
	Which Months: All Year Statistical Basis: None specified	Connectors in gas/vapor service or light liquid service (less than 0.5% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every two years. Subpart H. [40 CFR 63.174(b)(3)(ii)]
	Which Months: All Year Statistical Basis: None specified	Connectors in gas/vapor service or light liquid service (opened or otherwise had the seal broken): Presence of a leak monitored by 40 CFR 60, Appendix A, Method 21 within three months after being returned to organic HAP service or when it is reconnected. If monitoring detects a leak, repair according to the provisions of 40 CFR 63.174(d), as specified, except as provided in 40 CFR 63.174(c)(1)(ii). Subpart H. [40 CFR 63.174(c)(1)(i)]
	Which Months: All Year Statistical Basis: None specified	Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Comply with the requirements of 40 CFR 63.169. Subpart H. [40 CFR 63.174(c)(2)(i)]
		Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Organic HAP monitored by technically sound method within three months after being returned to organic HAP service after having been opened or otherwise had the seal broken. If monitoring detects a leak, implement repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(c)(2)(ii)]
	Which Months: All Year Statistical Basis: None specified	Connectors in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Subpart H. [40 CFR 63.174(d)]
		Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with 40 CFR 63.174(a) through (c). Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(1)]
	Which Months: All Year Statistical Basis: None specified	Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of connectors as frequently as practicable during safe to requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(2)]
	Which Months: All Year Statistical Basis: None specified	Connectors in gas/vapor service or light liquid service (unsafe-to-repair): Demonstrate that repair personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.174(d). Comply with this requirement instead of the requirements in 40 CFR 63.174(a), (d), and (e). Subpart H. [40 CFR 63.174(g)]
		Connectors in gas/vapor service or light liquid service (inaccessible, ceramic, or ceramic-lined): Make a first attempt at repair within 5 days after leak is detected by visual, audible, olfactory or other means, and complete repairs no later than 15 calendar days after leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Comply with this requirement instead of the monitoring requirements of 40 CFR 63.174(a) and (c) and from the recordkeeping and reporting requirements of 40 CFR 63.181 and 63.182. Subpart H. [40 CFR 63.174(h)(2)]
	Connectors in gas/vapor service or light liquid service: Calculate percent leaking connectors as specified in 40 CFR 63.174(i)(1) and (i)(2). Subpart H. [40 CFR 63.174(i)]	
311	[40 CFR 63.174(b)(3)(ii)]	
312	[40 CFR 63.174(c)(1)(ii)]	
313	[40 CFR 63.174(c)(2)(i)]	
314	[40 CFR 63.174(c)(2)(ii)]	
315	[40 CFR 63.174(d)]	
316	[40 CFR 63.174(f)(1)]	
317	[40 CFR 63.174(f)(2)]	
318	[40 CFR 63.174(g)]	
319	[40 CFR 63.174(h)(2)]	
320	[40 CFR 63.174(i)]	

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- 321 [40 CFR 63.180]
- 322 [40 CFR 63.181]
- 323 [40 CFR 63.182(b)]
- 324 [40 CFR 63.182(b)]
- 325 [40 CFR 63.182(b)]
- 326 [40 CFR 63.182(c)]
- 327 [40 CFR 63.182(d)]
- 328 [40 CFR 63.2480(Table 6)]
- 329 [40 CFR 63.2480]
- 330 [LAC 33.III.2111]
- 331 [LAC 33.III.5109.A.1]

Comply with the test methods and procedures requirements provided in 40 CFR 63.180. Subpart H.  
 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 63.18 (a) through (k). Subpart H.

Submit Initial Notification: Due within 120 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(b)(1). Subpart H. [40 CFR 63.182(b)]

Submit Initial Notification: Due within 90 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(b)(1). Subpart H. [40 CFR 63.182(b)]

Submit application: Due as soon as practicable before the construction or reconstruction is planned to commence (but it need not be sooner than 90 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H). Submit application for approval of construction or reconstruction required by 40 CFR 63.5(d) in lieu of the Initial Notification. Subpart H. [40 CFR 63.182(b)]

Submit Notification of Compliance Status: Due within 90 days of the compliance dates specified in the 40 CFR 63 subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(c)(1) through (c)(3). Subpart H. [40 CFR 63.182(c)]

Submit Periodic Reports: Due semiannually starting 6 months after the Notification of Compliance Status, as required in 40 CFR 63.182(c).

Include the information specified in 40 CFR 63.182(d)(2) through (d)(4). Subpart H. [40 CFR 63.182(d)]

Permittee shall comply with the requirements of 40 CFR 63 Subpart H and the requirements referenced therein, except as specified in 40 CFR 63.2480(b) and (d). Subpart FFFF. [40 CFR 63.2480(Table 6)]

Permittee shall comply with all applicable requirements of 40 CFR 63.2480. Subpart FFFF.

Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.

Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Emits Class III TAPs only. MACT is not required.

**UNF0003 PYR/NVP/PVP/PVP-I Plants**

- 332 [40 CFR 60.]
- 333 [40 CFR 61.342]
- 334 [40 CFR 63.1]
- 335 [40 CFR 63.2450]

All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A.

Comply with the overlap provisions of 40 CFR 63.110(e)(1). [40 CFR 61.342, 40 CFR 63.110(e)(1)]

All affected facilities shall comply with all applicable provisions in 40 CFR 63 Subpart A.

Permittee shall comply with all applicable provisions of 40 CFR 63 Subpart FFFF.